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ABSTRACT

The world's population faces a series of problems that are similar in all countries, although more exacerbated in developing nations. This population study presents statistical facts and information concerning developed and developing nations and their populations, growth, the status of women, migration, the labor force, changing age structures, refugees, and food production. Regions covered are: (1) North America; (2) Western Europe; (3) The Soviet Union and Eastern Europe; (4) Asia and the Pacific; (5) Middle East and North Africa; (6) Sub-Saharan Africa; and (7) Latin America and the Caribbean. The report may be used for teaching about populations in regions of the world. (NL)

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A POPULATION LEARNING SERIES

ED328479

Population in Perspective: Regional Views

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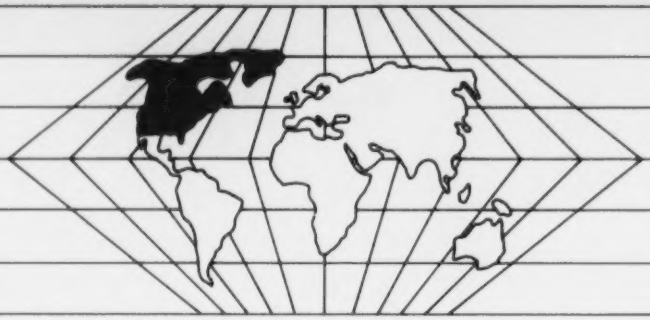


North America

As North America's two vast nations, the United States and Canada, look to the 21st century, they face their own combination of demographic challenges: low fertility, resulting in an increasingly old population; the maturing of the extra-large generation born after World War II; and a worldwide reputation as the land of opportunity for potential immigrants.

North America covers approximately 16 percent of the world's land area and, with a 1986 total population of 267 million, is home to 5.4 percent of the population. The region is rich in natural resources and has been very successful in agricultural production, though decreasing international demand for North American food caused farm exports to plummet in the 1980s.

Parts of both the United States and Canada are highly urbanized, but both have open, sparsely settled areas. The region's terrain ranges from the flat plains of the central areas to the peaks of the Cascade and Rocky Mountain ranges to the depths of the Grand Canyon. Fully 85 percent of all Canadians live in a 200 mile-wide strip running east and west along the U.S./Canadian border, while the majority of U.S. citizens live along its east and west coasts.

POPULATION DYNAMICS IN NORTH AMERICA

The United States and Canada share similar demographic experiences. The scope of demographic change, however, is somewhat broader in the U.S. than in Canada, due to the U.S.'s larger population. In order to present the most accurate picture, the population dynamics of these two countries are being discussed separately here.

U.S. Population Growth: Fertility and Mortality

The United States' 1986 population of 241 million makes it the fourth most populous nation in the world, following China, India, and the Soviet Union. Its annual growth rate stands at 0.9 percent, one of the highest of all developed nations, but has fallen steadily over the last decade and is projected to drop to less than 0.4 percent a year by 2020. Despite a total fertility rate of 1.8 average lifetime births per woman—below the 2.1 births needed to replace the parents—the annual number of births in the U.S. rose from 3.1 million in the mid-1970s to 3.7 million in 1986. This is because the baby boomers are now in their childbearing years, and while their individual families are small, their numbers are great.

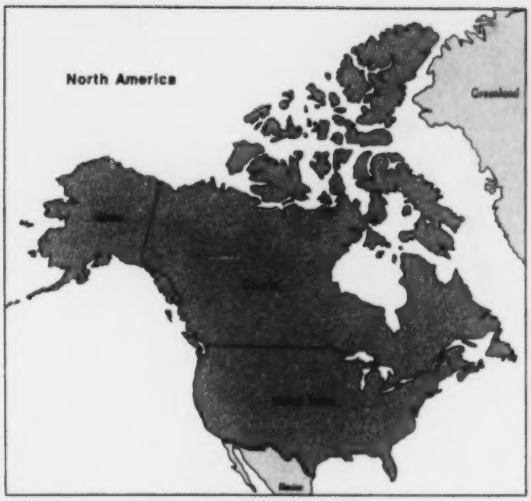
Mortality is the lowest it has ever been. A low birth rate combined with a low death rate means that the U.S. is undergoing dramatic shifts in its age structure: The proportion of the population aged 65 and over is higher than ever, causing a rise in the median age of the population from 28 years in 1970 to an all-time high of 31 in 1986. People age 65 and over (particularly those 75 and over) are the fastest growing age group in North American society.

At the same time the country faces caring for an aging population, the number of children born to the 60 million baby boomers is substantial enough to elicit some concern over present and future education and child care expenses. The expected rise in the number of school age children is likely to rekindle interest in education reminiscent of the 1960s and will further challenge planners.

International Migration and Refugees in the U.S.

Immigration is another major dimension of U.S. population change. In 1985 the U.S. admitted approxi-

Art Haupt



This regional paper on North America focuses on the United States and Canada. Geographically, Greenland and Bermuda belong in this region, but these two countries are possessions of Denmark and the U.K., respectively, and as such are not members of the U.N. and not considered in this paper. Mexico is sometimes considered part of North America, but it is more logically linked with the countries of Latin America.

Different statistical sources can have different regional definitions, so be careful when comparing regional data.

mately 570,000 legal immigrants who accounted for over 26 percent of population growth registered that year. Immigrants from Asia and the Middle East constituted nearly half (47 percent) of this group.

While legal immigration is subject to various limitations, the nation's liberal policy toward refugees has raised the total considerably in some recent years. Limits on the number of refugees admitted, initially set at 50,000 a year, is currently determined by consultation between the President and Congress. Over the last decade the numbers of refugees admitted rose with the flow of people out of war-torn Southeast Asia, while more recently, many refugees have come to the U.S. from the Caribbean, especially Cuba and Haiti. Under current policy, refugees may apply for permanent residence status after one year and can opt for citizenship after four more years.

In addition to legal immigrants and refugees, a considerable number of illegal immigrants enter the U.S. each year. The U.S. Census Bureau has estimated the number of annual illegal immigrants at 200,000. Other observers set that number at 500,000 or more, which when added to legal immigrants, suggests that immigration to the U.S. may have climbed back to its record high of over a million a year observed in several years at the beginning of this century. For the United States, more than almost any other country, immigration plays a very large role in population growth—and its proportion of annual increase will grow if the fertility rate remains low.

Although historically a nation of immigrants, the U.S. is seeing widespread discontent with current immigration policy and enforcement procedures. In recent national opinion polls, the majority of respondents were in favor of reducing immigration of all kinds. Immigration policy is currently under debate and will no doubt undergo several revisions in the decades to come (see box).

Canadian Population Growth: Fertility and Mortality

Throughout its history, Canada's population growth has fluctuated widely. The country grew rapidly during its first century, but experienced a lull in growth during the last half of the 19th century as large numbers of people moved to the fast-industrializing New England states south of its border.

During the first decade of the present century, however, immigrants flooded into the country, helping to raise Canadian growth to an annual 3 percent. After a depression-era drop in fertility and immigration, followed by a post-World War II baby boom, Canadian population growth settled down to today's 1 percent per year. In 1986 the nation's population totaled an estimated 25.6 million persons.

Like the United States, the most outstanding feature of Canada's recent demographic history is the large number of children born after 1939, especially after World War II. For both countries this generation of baby boomers has generated new challenges as it has matured. But in Canada the baby boom's impact hit particularly hard, for this generation represents an especially large surge in births. Over 50 percent more children were born in Canada from 1940 to 1959 than in the previous two decades. For the United States, in contrast, the baby boom amounted to a 36 percent increase over the same period.

After the baby boom, a new pattern developed. Canada's total fertility rate dropped to 1.7 births per woman, down from a high of 3.9. As a result, the number of Canadians in their mid-20s to late-30s is very large, while younger people, born during the "baby bust" since the mid-1960s, are relatively few. However, the population continues to grow because of the large number of women in their prime childbearing years.

The movements of the baby boom and baby bust age groups through their life cycles has important implications for Canadian institutions, ranging from schooling to marriage, the labor force, and retirement.

Lawrence Peloso

Whereas most immigrants to the U.S. in the 19th century were from Europe, today nearly half come from Asia and the Middle East.

International Migration and Refugees in Canada

Embassy of Canada

Immigrants are an important segment of Canadian society. The Canadian government encourages a moderate, controlled increase in immigration.

Migration has long been an influential force in Canada's population changes. Traditionally a country of heavy immigration, Canada actually lost more people than it received in the latter half of the 19th century, mostly through emigration to the United States. The 1901-1911 period saw a dramatic reversal in this trend with the arrival of 1.5 million immigrants; at that time net migration (the number of immigrants minus those who leave the country) accounted for 44 percent of the country's population growth.

Canada experienced significant losses of skilled persons through emigration to the United States during the period after World War II. Through the 1950s and 1960s, approximately one out of every five workers leaving Canada was skilled in contrast to one out of every 10 entering the country. Since the late 1960s, this "brain drain" has subsided, due in part to the arrival of Americans resisting the Vietnam War. Now the migration pattern may be described more accurately as an exchange, rather than a drain, of skilled persons. The Canadian government carefully regulates immigration in order to admit those with desired skills.

IMMIGRATION POLICY IN NORTH AMERICA

For almost 100 years after independence, virtually no laws governed the admission of immigrants to the U.S. Since that time, however, immigration laws have increasingly determined which countries can send migrants.

After the peak immigration years of 1880 through 1920, when most people immigrating to the U.S were southern and eastern Europeans, laws were enacted prohibiting entry of Asians and prescribing the physical and mental health, financial status, and morals of other aliens. These first discriminatory laws also included restrictions based on race and political beliefs. The Immigration Act of 1929 established annual quotas of about 154,000 people and sought to retain the racial and ethnic composition of the nation's population as of 1890. This had the effect of favoring northern and western Europeans over other immigrants.

The 1965 amendment to the Immigration Act of 1952 shifted restrictions based on national origins to priorities based on family reunification and needed skills and professions. This meant a dramatic change in the geographic origin of immigrants. Between 1820 and 1964, 80 percent of the immigrants admitted to the U.S. were European. In the late 1970s, Europeans constituted only 13 percent of the total, while Asians and Latin Americans strongly predominated.

The latest reform measure passed in the U.S. Senate and House of Representatives in the fall of 1986. A comprehensive bill aimed at curtailing illegal immigration, the bill imposed sanctions on employers hiring illegal aliens. In addition, the bill gave amnesty to all aliens residing in the U.S. since 1982, and to aliens who worked in U.S. agriculture for at least 90 days prior to May 1986.

Canada first attempted to control the flow of immigrants in 1878 with restrictions on the entry of Asians. These were reinforced by the Immigration Act of 1910, which gave special treatment to British subjects. In 1949 preferential treatment was broadened to include migrants from France and extended two years later to persons from other northwestern European countries.

In 1962 a basic change in policy was introduced, removing the racial bars to immigration. The new regulations emphasized the "education, training, skills or other special qualifications" of potential immigrants in an attempt to fill special employment needs in the Canadian economy. Thus, the selection of immigrants has favored the highly skilled.

Canada's immigration policy was subjected to a thorough review in the period 1973-1975, resulting in a new Immigration Act which took effect in 1978. The economic slowdown of the 1970s caused policymakers to question the high level of immigration of the prosperous 1960s. In addition to the total numbers, the 1978 Act focuses on the ethnic character of the immigrants and their geographic distribution upon arrival in Canada. It established a target level for immigration on a year-to-year basis. Its impact may be seen in the marked decline in the number of immigrants, from 214,000 in 1973-1974 to 82,000 in 1978-1979.

In 1986 the Canadian government encouraged a moderate, controlled increase in immigration levels in coming years, subject to Canadian economic and labor market conditions—it sees immigration as a positive long term economic benefit. As a result targets have been set for immigrants at 85,000-90,000 for 1985, increasing to 105,000-115,000 in 1986, and further to 115,000-125,000 in 1987.

"The new reality is forcing us to redefine the relationship between the rich and the poor, the North and the South. In our own interest, we in the North must understand what is happening and question our attitudes, rethink our values, and adapt our behavior to respond to the new environment that is being created around us. For our interests and our future are intertwined."

—Canadian International Development Agency

CHALLENGES FOR THE FUTURE

Changing Age Structures

The growing proportion of elderly in North America has serious policy implications, particularly for health care and social security. Since persons aged 65 and over suffer more often from illness and chronic health conditions, the increased numbers of elderly people will put greater pressure on all health care facilities. In Canada almost half of the men and more than one-third of the women aged 75 and over are hospitalized in a given year. Furthermore, it is projected that by the turn of the 21st century half of the patient-days in hospitals will involve persons of retirement age. In the U.S. health care policy has two often contradictory objectives: quality care and cost containment. Neither is being met by current programs for the elderly, primarily because of the mismatch between the programs and the elderly's health care needs.

Social security systems in the U.S. and Canada are feeling the strain of the growing numbers of elderly as well. These programs will be increasingly difficult to continue for they both depend largely on a financial balance between payments from working people and withdrawals by pensioners. The falling ratio of workers to retirees has spurred concerns about the solvency of both the Social Security system in the United States and the Canadian Pension Plan. The number of retired workers will increase sharply when baby boomers reach retirement age, and smaller generations that follow may have difficulty making the necessary contributions.

Labor Force and Employment

Both the U.S. and Canada have seen unprecedented growth in the labor force due in no small part to increases in women's participation. In Canada, the share of women in the labor force more than doubled between 1960 and 1985, jumping from 19 percent to 40 percent. Women in the U.S. have also made significant contributions to labor force growth: during the same period their participation grew from 26 percent to over 40 percent. These women have made inroads into many traditionally male professions, ranging from computer operators and bus drivers to lawyers and judges. Traditional jobs for women and men still predominate, however, and male/female pay inequities remain a major concern.

In the last 40 years most industrialized Western countries have experienced a shift in the composition of employment from manufacturing and agricultural labor to service industries. Although a continuous trend, the shift toward services has accelerated since 1970. As a result, regions in North America that were preeminent in manufacturing or agriculture have suffered as those industries have been eclipsed by newer ones.

Urban Growth

During the 1970s, the U.S. experienced a "rural renaissance" as population growth in nonmetropolitan areas outpaced that of metropolitan areas. For the first time in the nation's history, more residents of the U.S. moved away from metropolitan areas than moved to them. The metropolitan population of the U.S. grew by an average 1.0 percent annually during the 1970s, while the nonmetropolitan areas grew by an annual average of 1.3 percent. By the end of the 1970s, the growth of nonmetropolitan areas slowed so that by the 1980s, the "turnaround" had ended. With nonmetro growth slowing dramatically, metropolitan areas again took the lead. Average annual metro growth remained the same, 1.0 percent, through the 1970s and on to 1983; nonmetro growth dropped from an average 1.3 percent per year in the 1970s to 0.8 percent from 1980 to 1983. Nearly 30 percent of the nonmetropolitan counties that experienced population growth in the 1970s are losing population again, just as they had before the surge. Today, over 76 percent of the U.S. population lives in areas now defined as metropolitan.

American Health Care Association

Persons aged 65 and over constitute 12 percent of the North American population. They are the fastest growing age group in this region.

Differences between Canadian rural and urban population growth are not as marked. Canada's rural population increased by 14.5 percent between 1971 and 1981, compared to a 12.3 percent increase for the urban population. During the 1980s, many Canadian cities have been experiencing conditions of little or no growth. For Canadian planners, coping with the special problems of slow growth is one of the new issues of the 1980s.

Embassy of Canada

Urban landscape in Toronto, Canada. Metropolitan areas in North America are once again growing faster than their non-metro counterparts.

Food Production

North America emerged as a major worldwide supplier of grain in the 1970s, but agricultural exports dropped off drastically during the 1980s.

The region was already a major agricultural exporter in the 1940s; sales expanded during the 1950s and 1960s then more than doubled during the 1970s, when farmers in North America saw a tremendous boom in worldwide sales of their agricultural products. Demand for grain during the 1970s was high, reflecting rapid population growth in developing countries, poor agricultural management, and soil erosion that drained cropland of its fertility. These factors led to a decade of extraordinary growth in agricultural production in North America, which increased farm incomes and agricultural employment.

A consequence of rapid expansion of agriculture, however, was growing surpluses of grain. As grain stockpiles rose, prices fell. In the early 1980s, the farmer fell victim to a combination of circumstances that spelled trouble: a weak world economy, the strong value of the (U.S.) dollar, and strong overseas competition in wheat, corn, rice, soybeans, and cotton. Fully 30 countries that were food importers in the 1970s became exporters in the 1980s. Farmers in the U.S. were additionally harmed in 1979 when grain sales to the Soviet Union were halted by presidential mandate. The result has been a sharp drop in farm exports for both countries in the region. In the U.S. agricultural exports dropped to an estimated $27.5 billion in 1986 from $44 billion in 1981.

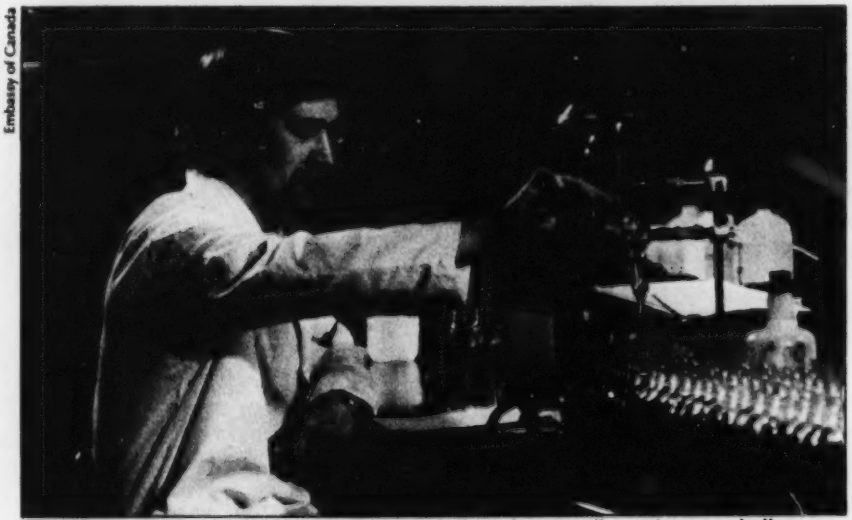
Stockpiles of grain in the U.S. grew to such vast quantities that in mid-1986 government officials estimated that there was enough surplus wheat being stored in the U.S. to make 12 loaves of bread for every person in the world.

The U.S. and Canada also import agricultural products. In May 1986, in fact, U.S. farm trade was actually in deficit: for the first time since 1959 the U.S. imported more farm products than it exported. The principal reason for this deficit was the fall in exports of grain.

Land and the Environment

Throughout the last century the environment in North America has suffered as a consequence of changing production and consumption patterns. Acid rain has emerged as a growing threat to forests; it is destroying fish and plants in eastern North America. Industry produces air pollutants and acids at an unprecedented rate and scale, causing forests throughout the region to receive as much as 30 times more acidity than they would if precipitation were falling through a pure atmosphere. A wide variety of pollutants, including acid-forming sulfates and nitrates, gaseous sulfur dioxide, ozone, and heavy metals, are weakening North American forests, thereby threatening not only future wood supplies but entire ecosystems.

Air pollution, largely the result of fossil-fuel combustion, originated with the Industrial Revolution. The problem worsened as the number of factories and homes increased, and many cities initiated control measures. Emissions of sulfur and nitrogen oxides as well as other combustion pollutants continued to rise, though in the last two decades sulfur dioxide emissions have fallen, particularly in Canada.


Embassy of Canada

Water sampling for acid rain. Environmental degradation will continue to challenge North American policymakers.

Embassy of Canada

Apprentice ironworker in Alaska. Women are an important and growing segment of the North American labor force.

While industry has provided major pollutants, the agricultural boom of the 1970s brought with it environmental costs as well. Soil erosion, groundwater pollution, and surface water pollution from runoff loaded with pesticides and fertilizer are just some of the detrimental effects of intensive farming.

The region has made successful efforts to limit and deal with air pollution, but a new problem has emerged: the disposal of nuclear and toxic wastes. Communities in the U.S. have actively lobbied the government in an effort to keep industry from disposing of these wastes nearby. The toxic wastes include chemicals pumped by industries into water or the ground and can be lethal to humans and animals.

Nuclear waste is especially dangerous. Because of the high levels of radiation present in shutdown nuclear reactors, the disposal of retired plants and equipment is complex and costly. Moreover, decommissioning, the process of cleaning up and burying a retired nuclear plant to protect the public from radioactivity, is a highly expensive procedure—it can cost as much as actually building the power plant in the first place.

STATUS OF WOMEN

One striking demographic characteristic of women in the U.S. and Canada in the 1980s is their increasing tendency to delay marriage and childbearing. In 1985 nearly a quarter of North American women aged 30-34 had no children.

The trend toward delayed childbearing stems in part from economic difficulties women face as they compete in a tight job market, caused both by their large numbers and the turbulent economy. Women's increasing levels of education and commitment to careers can be expected to encourage delayed childbearing even after economic prospects brighten.

Day care for children of working parents is a major concern of the 1980s. A proportionate increase in child care facilities did not accompany the increase in women in the labor force. If suitable day care is unavailable, women on the career track may well be unwilling to interrupt their jobs, deciding instead to delay childbearing.

"For the first time, I believe Africa is prepared to pay more than lip service to necessary (population-related) reforms. The United States and other industrialized nations must be prepared to match [Africa's] efforts with resources and know how to help Africa help itself."

—James H. Scheuer, U.S. Representative, (D-N.Y.)

The movement of women into the paid labor force, while generally emancipating, brings with it problems and frustrations. Many U.S. and Canadian women who work outside the home still perform the bulk of domestic chores. The women's movement in the region made great strides in freeing women of traditional roles, but the view that women should have responsibility for daily household tasks, such as cooking and cleaning still predominates.

PERSPECTIVES ON POPULATION POLICY

Neither the U.S. nor Canada has a population policy deliberately aimed at influencing the size, rate of growth, distribution, and composition of the country's population. Immigration is the major population-related policy for the two countries. Although Canada has enacted more restrictive policies in the last 10 years (see box on page 3), the region's immigration policies are relatively open. Thus, the U.S. and Canada remain important receiving countries for immigrants and refugees.

In Canada some environmental groups have called for a formal policy to slow population growth. The government's response to this pressure has been relatively weak. In 1976 the Science Council of Canada concluded that the nation's population growth should be slow and set an initial "reasonable" target for 28 to 30 million for the year 2000, assuming that fertility rates remained stable. In the United States, environmental groups have also pressed for population stabilization and the adoption of an official population policy. In addition, pressure has been placed on the government by groups interested in stricter immigration laws. Policymakers have been slow to react with concrete laws, though the issue of immigration has been debated in Congress for years (see box).

The debate continues within both countries of North America as to what direction population policy should take. Should growth be tightly restricted or allowed to expand? Whatever the outcome, it will have an impact that will be felt throughout the world.

Population Perspectives: North America is one in a series of seven regional papers examining population change in the world's regions published by the Population Reference Bureau, October 1986. It was compiled by Susan Levenstein and edited by Janine Adams based on two of the Population Reference Bureau's *Population Bulletins*, "U.S. Population: Where We Are; Where We're Going" (Vol. 37. No. 2), by PRB staff, 1982; and "Canada's Population: Growth and Dualism" (Vol. 33, No.2), by Roderic P. Beaujot, 1978. PRB and other sources provided additional background information.

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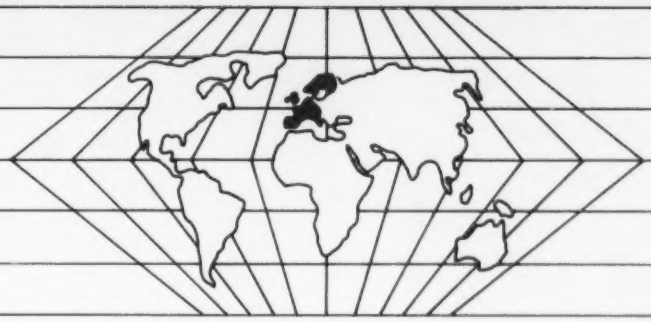


Western Europe

Western Europe has the slowest population growth of any world region. Most projections show its population will stop growing and begin to fall in the next few decades, due to extremely low fertility.

Population dynamics play an important role in and raise important issues for the region's future:

- Western Europeans over age 64 constituted 13 percent of the region's population as of 1986. Low fertility results in the aging of a population, since fewer and fewer children are born relative to the number of those already alive. Social security and adequate care for the elderly are major concerns in this region.
- Some people fear that the shrinking pool of young people will force a drop in the relative military strength of the region.
- For many years following World War II, Western Europe encouraged immigration of new workers from outside the region. The fertility of these postwar immigrants is higher than the fertility of the native, or indigenous, population. Some governments are concerned with the future of their country's ethnic composition.

POPULATION DYNAMICS

Western Europe's population totaled about 350 million in 1986. Some 60 percent of these people live in the five most populous countries: the United Kingdom (population 57 million), France (55 million), the Federal Republic of Germany (61 million), Italy (57 million), and Spain (39 million).

By the year 2000, the total population will increase to only 361 million, with almost no population growth in the northern and western parts of the region, and only a slight increase in southern Europe. This is minuscule growth, considering that the rest of the world will be growing by 1.2 billion during the same period.

The primary cause of the decline of Western Europe's population growth is falling birth rates, which remain only slightly higher than death rates. In some Western European countries, such as the Federal Republic of Germany (FRG or West Germany) and Denmark, more people die each year than are born.

Population Growth: Fertility and Mortality

Despite their differences, the 19 countries of Western Europe discussed here show similar demographic traits. Fertility rates have been declining since the mid- to late-19th century. There is no longer an agricultural need for large families; therefore the economic cost of having children is becoming greater than the benefits.

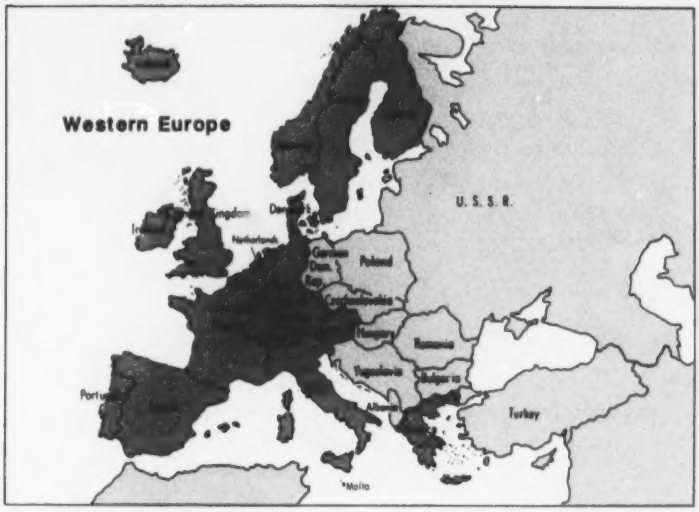
This economic change, combined with women's increased pursuit of employment outside the home, has limited the desire for large families. Most women in Western Europe have fewer than the two children necessary for replacement level fertility (one each for the mother and father). Western Europe as a whole has very low fertility rates. The total fertility rate (TFR), or the average number of children born to a woman during her lifetime, is 1.8 for all of Western Europe. It takes about 2.1 children per woman to "replace" a generation of women and men in the long run. (Hence, a 2.1 TFR is considered "replacement level" fertility.)

The highest TFR in the region is Ireland's 2.6, and the lowest is the FRG's 1.3. By comparison, the TFR in most African countries is over 6.

The countries of Western Europe lead developed countries in low adolescent fertility, the result of a con-

German Information Center

A young West German family. Fertility rates have been declining in Western Europe for over 100 years. Today, most of the region's couples have fewer than two children.



This regional paper on Western Europe includes the 19 European countries highlighted at left. Different statistical sources can have different regional definitions, so be careful when comparing regional data.

certed effort toward providing contraceptives to sexually active teenagers. By encouraging the use of family planning, Western European governments have met their aim of decreasing abortions among teens. Both rates are much lower than those in the U.S.

Along with low fertility, Western Europe also enjoys low mortality, a result of technological advances in public health and medicine. Infant deaths average only 14 per 1,000 live births. (Africa's infant mortality rate of 118 is eight times higher.)

International Migration and Refugees

Immigration has played a significant role in Western European population dynamics during the last 40 years. Largely because of post-World War II reconstruction, many workers came from abroad, especially from North Africa and Turkey, creating a great influx of migrants. The United Kingdom received migrants from former British colonies as well.

This trend of mass migration for employment reasons persisted until the 1970s. At its peak, a worker from a less developed country who found employment in Western Europe could expect to triple his or her income virtually overnight. This benefited not only workers, but their home countries as well, since traditionally workers sent their families great portions of their earnings which in turn helped the local economy.

The flow of job-seeking migrants slowed noticeably in the early 1970s, a result of the energy crisis and subsequent recession. By that time, quality of labor became more important than quantity, and many migrants were forced to return to their home countries when residence and work permits were not renewed. In 1986 there were as many as 16 million legal immigrants living in Western Europe.

Although the number of workers entering the region is declining, births and family reunification contribute to a stable foreign population. Immigrants and their children, however, are having difficulty being integrated into Western European life. Examples of clashes between native-born citizens and immigrants can be found among the Indians and Pakistanis in Great Britain, the North Africans in France, and the Turks in the FRG.

More recently it has been the home countries of migrant workers who are encouraging return migration. As countries develop economically, the skills their citizens learn abroad become useful to their native countries, and governments encourage the return of those with skills useful to the development efforts at home.

Refugees are also a significant segment of the Western European population. Refugees flee their home countries fearing persecution; they seek permanent asylum or resettle-

Aghan refugees in Ladispoli, Italy wait for their refugee status to be determined.

ment. Over the past decade, refugees from all over the world have found haven in Western Europe. They include immigrants such as the "boat people," who fled the conflicts in Southeast Asia. France is the leading host country, housing an estimated 119,000 of Western Europe's 277,000 refugees. Refugees pose a different problem from other migrants, for they can hold little hope of returning to their country of origin.

"The task of government in a free society is to help everyone achieve their aspirations. By improving family resources and so better offsetting the cost of bringing up children, and at the same time improving living conditions and creating an atmosphere more favorable to families, we should achieve a 'self-regulating' and satisfactory demographic situation."

—Madame Monique Pelletier,
French Minister for Women's Affairs

CHALLENGES FOR THE FUTURE

No consensus exists in Western Europe regarding population growth. Some feel that slow or negative growth is detrimental to the region, saying it undermines military strength, and creates problems in caring for the aged. Others view slowing population growth as a positive factor, which may well lead to less congestion in the cities and a higher quality of life. But these nations must face the special problems brought on by slow or negative growth.

Changing Age Structures

The aging of Western Europe's population is expected to continue, the result of the region's low fertility and increasing life expectancy. Western European males born in 2000 are expected to live to be 73; the life expectancy for females is projected to be 80. This is comparable to other developed regions, but remains 15 to 20 years longer than the developing world.

A population with a high proportion of elderly has important social implications. A smaller proportion of young people—those economically active in the labor force—will be supporting a large group. A larger share of the younger generation's tax dollars will go toward caring for the elderly. And since Western Europeans are having fewer than two children per family, the option of offspring caring for their elderly parents is probably not as likely as in other, more fertile, regions of the world.

The aging of the population will force a shift in the focus of health services in Western Europe toward the medical needs of the aged. In time, gerontology will no doubt become an even more important branch of medicine. Not only will more health specialists be focusing on the specific problems of the elderly, but more facilities, such as nursing and retirement homes, will be necessary.

A trade-off will have to occur between the needs of the elderly and the needs of the young. The increasing elderly population will bring on a shift of emphasis from care of infants and children to the health needs of the older population. Because of low fertility, however, nursery schools and day care centers will become less important.

Labor Force and Employment

Western Europe's job market has grown little since 1973 and continues to undergo dramatic changes. Agricultural and industrial employment is declining, while service sector employment makes rapid strides. Part-time jobs are becoming more widespread in Western Europe as firms attempt to obtain more flexibility in their work forces and reduce labor cost.

Unemployment in the region is on the high side. Youth unemployment has grown to exceptionally high levels and women are generally more likely to be unemployed than men. (Older persons suffer less as a group from high unemployment than from retirement- and income-support-related problems.) Persistent economic stagnation has curbed any supply-side hopes of the economies growing their way out of unemployment any time soon.

Urban Growth

Western Europe is the most highly urbanized region in the world. From Great Britain to Italy, some 70 to 85 percent of Western Europeans reside in urban areas, which are most heavily concentrated in the north.

With industrialization in the 19th century, Western Europeans began moving to the cities in search of work. In some of the countries, Sweden and France for instance, urbanization has continued, though urban growth rates have slowed. But other countries such as the FRG, Switzerland, Austria, and the Netherlands, have seen a turnaround—more people are leaving the cities than are moving to them.

Many people view galloping urbanization as a negative factor of population growth—indeed, in many developing countries urban areas are growing to unmanageable sizes at society-wrenching speed. But in Western Europe, urbanization has largely been completed, so rapid urban change is not happening. However, the existence of a primarily urban society filling most of a continent does place great stress on the environment. And for urban dwellers, day-to-day tasks can generate tension—just getting to work or walking in the streets can be a chore in a crowded city. In addition, cities are known for their high crime and unemployment rates.

But cities are also vital cultural centers which can generate prosperity, as they are also employment centers. Cities offer many opportunities not found in the countryside.

Land and the Environment

Industrialization and urbanization have taken their toll on the environment. Two of the biggest threats to the environment and quality of life are human-made. The destruction of forests—not from logging or other human harvesting, but by a mysterious and deadly combination of airborne pollutants and natural stresses—has grown markedly in the region in recent years. These airborne pollutants are the products of industry. They include ozone, acid deposits in mists and fog, and other gaseous pollutants such as nitrogen oxides and sulfur dioxide. The forests of the FRG are the most seriously affected of those in the region, according to the World Resources Institute, but damage has also been seen in Switzerland, Austria, the Netherlands, France, Belgium, Denmark, and Sweden. There is some debate over whether the United Kingdom has been affected.

"If you look at Europe and then at other continents the comparison is terrifying. In demographic terms, Europe is vanishing. Twenty or so years from now, our countries will be empty, and no matter what our technological strength, we shall be incapable of putting it to use."

—Jacques Chirac, 1984 (currently Prime Minister of France)

The wider effects of this tree death have not yet been completely determined, but an immediate impact is on the forest industry in Western Europe, which employs at least 1.4 million people (700,000 in West Germany alone). This phenomenon has also been seen, though to a lesser extent, in North America.

Air pollution, largely produced by the consumption of fossil fuels such as oil, is as old as the Industrial Revolution itself. The problem worsened as the number of factories grew. More recently, controls have been implemented to regulate the emission of air pollution, but the problem continues to worry environmentalists. Water pollution is also the result of industrial waste. Such pollution has plagued industrialized countries since before the 20th century. In addition to the pollution of rivers and streams caused by the dumping of industrial waste, the groundwater supply in Western Europe and North America has been contaminated with toxic chemicals and human wastes. Since groundwater moves at a very slow rate, once it is polluted and unfit for consumption it might take decades, centuries, or even longer before natural processes flush out the pollution.

Food Production

Western European agriculture is among the most intensive and efficient in the world. Small in land area compared to other world agricultural regions, Western Europe nonetheless ranks first in the production of potatoes, rye, and barley. It is second to the Soviet Union in wheat (in 1984, Western Europe produced more wheat than the U.S. for the first time in over 100 years), and second to North America in corn and meat.

Despite problems with soil depletion caused by hundreds of years of use, the Mediterranean countries produce a variety of crops, including grapes, citrus fruits, and olives. The most productive yields of milk and meat per head of livestock are found in the countries of northern Europe.

Western Europe's fishing grounds are among the more productive in the world, yet the intensity with which they are harvested poses some threat to future production. In addition, water pollution also endangers marine life.

Western Europe is self-sufficient in wood products, coal, iron-ore, and electrical energy, but it lacks one vital resource: petroleum. Western Europeans are dependent on oil imports from the Middle East and North Africa. One possible remedy for this dependency could be the expanded use of natural gas combined with increased exploitation of North Sea petroleum fields. However, the oil crash of 1986 eased worries about prices or monopolization of the market by foreign cartels.

THE STATUS OF WOMEN

In Western Europe, as in North America, the role of women in society has improved over the past century. Women's active participation in the two World Wars helped to prove the importance—and necessity—of women's labor. Voting, labor, and individual rights grew out of the women's rights movements all over the region.

In the 1980s the countries of Western Europe, particularly the Scandinavian countries, stand among the world's most egalitarian. But this

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The growing proportion of people over 65 is of keen interest to Western European policymakers.

doesn't mean that Western European women enjoy complete equal rights and treatment. Particularly on the job, similar problems arise in varying degrees in all the countries of the region, such as inadequacies in career guidance and training for girls and women who traditionally opt for shorter education and training periods. In addition, family responsibilities—marriage and child-rearing—can interrupt women's careers.

Also, women in Western Europe are predominantly employed in a narrow range of jobs—those which require the fewest qualifications and offer the lowest pay and opportunities for promotion.

"If we want to look at the reasons why fertility is falling, we can't blame family planning, we must ask why people want small families. And to do that it is necessary to look at the whole structure of society."
—Elisabeth Jandl-Jager, Austrian psychotherapist

The European Community (E.C.) set up a three-year program in July 1982 designed to promote equal employment opportunities for women. This action program was aimed at consolidating the principle of equal treatment by strengthening individual rights. It sought to attain specific measures such as improvement of the occupational status of self-employed women and women in agriculture, as well as reform of tax systems which have a negative impact on the employment of women. It was also aimed at increasing the range of educational and training opportunities for women and changing the attitudes toward working women by promoting better relations between men and women in general. In addition, the E.C. sought to apply the principle of equal treatment to immigrant women.

Guest Workers in Western Europe

"Guest workers" are the "cheaper" method of solving a labor shortage. The more expensive way is to offer higher wages to native workers for types of work suffering the shortage. Each method has its shortcomings.

The free movement of labor across borders within the European Community (E.C.) is today customary and accepted. It was brought about by carefully negotiated contracts over many years. As a result between 4 and 8 percent of Western European countries' labor force are foreigners, except Switzerland where about 16 percent of laborers come from foreign countries.

The Federal Republic of Germany provides a typical example of Western European recruitment of migratory workers.

The FRG after 1953 experienced an increasing shortage of unskilled workers. This demand for workers caused the FRG to seek out labor in less developed nations with unemployment problems.

In 1955 it actively recruited a labor force of 28,000 migrants from Italy to fill the needs of the West German agricultural sector as well as the construction industry. Other agreements followed—with Spain and Greece in 1960, with Turkey in 1961, and with Yugoslavia in 1968.

By June of 1972 there were 2,300,000 foreign workers in the FRG and ten years later, in 1982, there were 4,600,000 guest workers and family members.

The West German government once provided incentives to guest workers to entice them to immigrate to the FRG. Today the tables have turned, and with over 4 million guest workers still in West Germany, the government now pays some guest workers incentives to return to their own countries.

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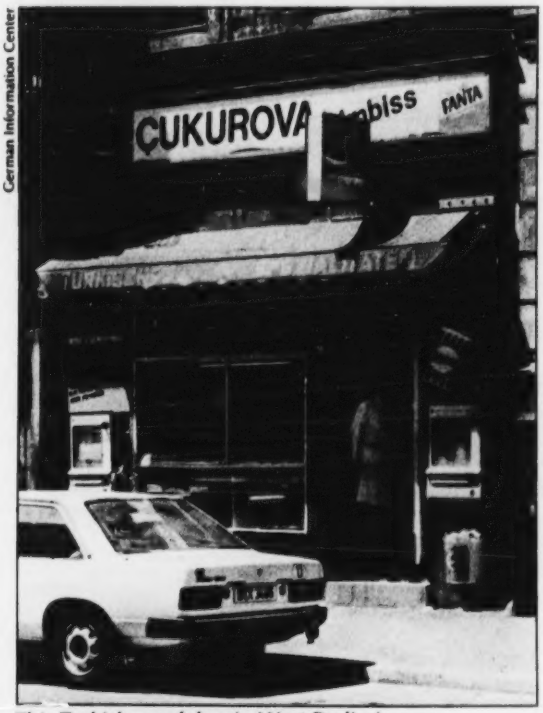

This Turkish snack bar in West Berlin is one indication of the prominence of Turkish guest workers in West Germany.

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PERSPECTIVES ON POPULATION POLICY

What should Western European countries do about the possibility of declining populations in the near future? What should they do about the problems of an aging population? What about immigrant groups and migrant laborers?

Policymakers have a choice of accepting prevailing population trends or trying to influence them. To try to increase fertility, they could adopt pronatalist policies to encourage higher fertility by creating financial incentives for larger families, or by limiting access to effective fertility control. Since Western Europeans hold very dear personal rights and freedoms, the latter method would no doubt be met with resistance.

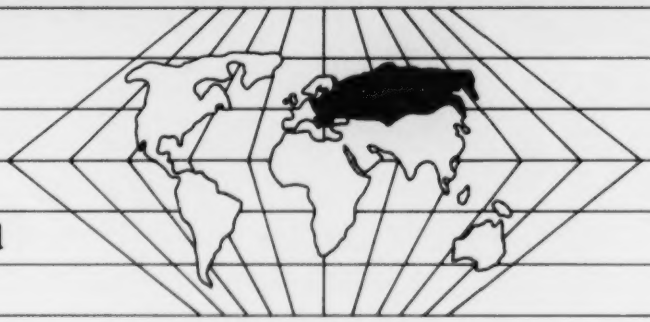
The Western European population could grow through immigration rather than natural increase (births minus deaths). An immigration policy which encourages naturalization, and assists with the integration of migrant workers into society would help achieve this—certainly there is no shortage of people who would leave poorer countries to reside in the relative wealth of Western Europe. Such immigration could pose employment problems, with migrant workers taking jobs considered desirable by the indigenous population. One solution that has been suggested is to develop a rotational policy with a time limitation on the migrant worker's stay before returning to his or her country of origin.

One way to adapt to an aging population is to raise the age of retirement. This raises the proportion of the population which is economically active, and decreases the proportion collecting pensions. With better health and higher life expectancies, perhaps the traditional perception of an appropriate retirement age is out of date. Nevertheless, more facilities for the care of the aged will be needed. Today there are fewer children of school age than there were two decades ago, so the facilities built in the 1950s and 1960s when postwar population growth was at its peak now lie empty. Some government officials are in favor of diverting funds from education to areas of higher need, such as those of the elderly. Empty schools could, for instance, be converted to nursing or retirement homes. These are only a few of the policy options available to European governments, as they deal with the three major areas of concern: declining fertility, an aging society, and immigration.

"There simply isn't enough to go around, and with this birth over death ratio there can never be enough."
—Margaret Thatcher

Population Perspectives: Western Europe is one in a series of seven regional papers examining population change in the world's regions published by the Population Reference Bureau, October 1986. It was compiled by Wendy Patriquin and edited by Janine Adams based on *The Effect of Current Demographic Change in Europe on Social Structure*, edited by Milos Macura, Beograd, Yugoslavia, 1979, and *International Labor Migration in Europe*, by Robert E. Krane, New York, 1979, and various other data sources. The box on guest workers was written by PRB's Alexander von Cube. Art Haupt of PRB provided valuable editing assistance.

The Population Reference Bureau, Inc., 777 14th St. NW, Washington, D.C. 20005, is a non-profit educational organization established in 1929. The Bureau is a source of information on the facts and implications of national and world population trends.



The Soviet Union and Eastern Europe

After World War II, fertility in the Soviet Union and Eastern Europe had fallen so low that policymakers in all nine countries became concerned. As a result, the leaders of all these countries (except Yugoslavia) enacted policies that were to varying degrees pronatalist, that is, designed to encourage couples to have more children. Their policies have been somewhat successful—but evidence indicates that the policy-induced fertility upturns will most likely be short-lived.

Since the countries of this region receive little or no immigrants, the only way that population can grow is through greater natural increase (the excess of births over deaths). Thus, the socialist countries have strongly encouraged women to have children. But a large proportion of the region's women work outside the home and are less willing to have large families.

All nine countries have one-party political systems, and (with the exception of Yugoslavia) centrally managed economies. In addition, the countries share the socialist ideals of political equality of women and men, state rule, and a society free of deprivation. While heavily influenced by the Soviet Union and its political and social history, the eight Eastern European countries have their own historical, cultural, and religious traditions.

POPULATION DYNAMICS

The Soviet Union alone is home to 280 million people, who represent 125 nationalities and speak 127 languages. Yugoslavia, with a population of about 23 million, also boasts great variety among its citizens: it has five official nationalities, 12 ethnic minorities, three major religions, and three cultural heritages. Czechoslovakia was formed from two republics that had been part of the Austro-Hungarian empire before it was dismantled after World War I. Its people are 65 percent Czech and 30 percent Slovak; however their differences in language and culture are not substantial. For the most part, each of the other Eastern European countries has an ethnically and linguistically homogeneous population.

Population Growth: Fertility and Mortality

Like many other developed countries, the socialist countries experienced a rise in fertility immediately following World War II. The Soviet Union and Eastern Europe's baby booms, however, were smaller and briefer than those of Western Europe or the U.S., stopping in the early to mid-1950s—well before fertility began to fall in Western Europe. In 1950, birth rates in the socialist countries (except the German Democratic Republic [GDR or East Germany], which has had exceptionally low fertility since World War II, and Albania whose higher birth rate is similar to many developing countries) ranged from a low of 21 births per 1,000 population in Hungary to a high of 31 in Poland. By 1959, birth rates had fallen, down to Hungary's low of 15 and a high of 25 in the Soviet Union.

These low birth rates were in part the result of the fact that there were not many women around to have babies: fertility was low during the

UN photo 167962

Soviet mothers and children participate in a 1984 peace march.

This regional paper discusses the USSR and the eight socialist countries of eastern Europe, named at left. Different statistical sources can have different regional definitions, so be careful when using regional data.

1930s, resulting in fewer potential parents in the 1950s and early 1960s. In addition, the drop in the birth rate may have been accelerated by the liberalized abortion laws adopted by all of the socialist countries between 1955 and 1960 (except GDR, which liberalized abortion in 1972, and Albania, where abortion is still illegal).

Birth rates in many of the socialist countries were reaching record-breaking lows by the late 1960s. In 1966 Hungary again had the region's lowest birth rate with 14 per 1,000 population, and Yugoslavia's birth rate was the highest of the eight low-fertility socialist countries (Albania excluded), at 20 per 1,000. When the women of the baby boom generation reached their childbearing years, policymakers expected a corresponding increase in the crude birth rate. That did not happen, and country leaders became concerned. In an effort to spur the birth rate in the 1960s, some countries initiated programs designed to encourage women to bear children, providing such incentives as family allowances, birth payments, and paid maternity leave. Some countries also restricted access to abortion.

These measures caused birth rates to climb in some of the region's countries, but merely stemmed the decline in fertility rates in other countries. A short-term rise in birth rates began in Romania, Czechoslovakia, Hungary, and Bulgaria, but by 1986 those rates had dropped to below the mid-1960s levels. This has sparked speculation that Eastern Europe's policy-induced fertility surges were temporary and will have little long-term impact.

Though unsuccessful in raising fertility in the Soviet Union and Poland, the pronatalist measures of those countries did halt fertility declines—their 1986 birth rates of 20 per 1,000 population are about the same as those of the 1970s. Birth rates in Yugoslavia have also remained stable throughout the 1970s and 1980s.

"The goal of the Czechoslovak population policy is not the increase of the numeric state of the population, but the improvement of its age structure, state of health, level of education and the socio-professional composition."

—Lukomir Strougal, Prime Minister, Czechoslovakia

Albania strays from the regional norm. Its demographic indicators place it with the world's less developed countries: the rate of natural increase (birth rate minus death rate) was estimated at 2 percent in 1986, comparable to some Latin American countries and most of Southeast Asia. However, Albania's birth rate has declined from 45 births per 1,000 population in 1955 to 26 in 1986. This fertility decline has occurred despite the government's officially stated policy that Albania can support (and needs) millions more inhabitants—"a readily understandable position in view of the country's small size and acutely perceived political isolation."

Mortality trends in the socialist countries have followed patterns similar to those of the other developed countries. Recently mortality has emerged as an increasingly important issue. Death rates in the Eastern European countries, while higher than those of other developed countries, are still low and unlikely to change drastically in the future.

The Soviet Union's most notorious demographic problem has been a rise in death rates among almost all age groups, but particularly among infants and young to middle-aged males. Reluctant to give publicity to this trend, Soviet leaders have withheld specific mortality statistics from public view. A leading factor in this mortality rise—one that the So-

viet government is seeking to alleviate—is the widespread alcoholism found throughout the nation, particularly among Soviet men.

International Migration and Refugees

Since the massive population movements following World War II, very little short-term or permanent international migration has taken place in the socialist countries.

Immigration is not an important factor in the region's population change, since the region hosts very few immigrants. In a few instances ethnic groups have been allowed to move away from the countries of the region—for example Soviet Jews were allowed to move to Israel—but for the most part emigration is not tolerated. Because of its high unemployment rate, however, Yugoslavia does allow workers to go abroad in search of work, though the number of workers abroad declined from 760,000 in 1974 to about 560,000 in 1980.

CHALLENGES FOR THE FUTURE

Future policymakers in the Soviet Union and Eastern Europe will face the paradox of being concerned about slow population growth and resulting labor shortages while at the same time contending with the negative aspects of previous rapid industrialization, such as congested urban areas and environmental degradation.

Life Expectancy and Health

Life expectancy in the Soviet Union and Eastern Europe is somewhat lower than in other developed regions—inhabitants of this region can expect to live about 71 years. In most developed countries life expectancy for males is lower than for females. In the Soviet Union, male life expectancy is considerably lower.

Infant mortality in the socialist countries is relatively high: the infant mortality rate (IMR) for all of the socialist countries except the GDR is above 15 deaths to infants under one year per 1,000 live births. Infant mortality rates of 43 in Albania and 29 in Yugoslavia in 1986 leave room for major improvement.

Infant mortality in the Soviet Union began to decline after World War II, but the decline was short-lived. The IMR fell from 81 infant deaths per 1,000 live births in 1950 to 23 in 1971. But in 1974 it rose to 28. No official infant mortality rates have been published since then, but unofficial reports show some increase. Alcohol consumption among Soviet women has been cited as one reason for the country's infant mortality rate.

Changing Age Structures

Low fertility results in an aging population, since fewer and fewer children are born relative to the people already alive. Because of their history of low fertility, the socialist countries—again, with the exception of Albania—are, of course, greatly affected. While 35 percent of Albania's population is under age 15 and only 5 percent is over 64, only 19 percent of GDR's population is under age 15 and fully 14 percent is 65 or older. This aging of the population has important implications for the future.

Labor Force and Employment

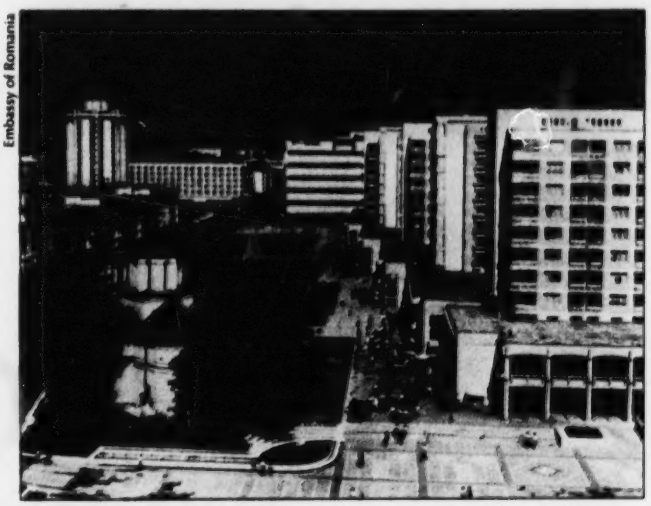
The region has experienced labor shortages as a result of the region's low fertility and resulting large elderly population. In addition, young people are compounding the problem by delaying entrance into the work force in order to remain in school until age 18.

This labor shortage is of paramount concern in the more industrialized parts of Czechoslovakia, Hungary, GDR, and the Soviet Union—most of the region's countries face labor problems to some extent. The decline in the growth rate of the region's working-age population is projected to continue until the end of the century, if not longer. (In parts of the Soviet Union the working-age population will actually decline in number.)

Beyond just numbers, Soviet leaders are concerned about the future ethnic make-up of the labor supply as well. Since minority groups are most often the fastest growing segments of society, their share of the total population becomes proportionally larger. The Soviet Union will be looking to members of minority groups to fill their labor needs (see box).

Urban Growth

Urban housing shortages have been posing problems since World War II. In many areas, governments invest heavily in industry at the expense of housing. As a result, not only is housing in short supply, but existing housing units are of poor quality. Studies conducted in Czechoslovakia in 1984 showed that over 500,000 families had no place to live and were residing with relatives or friends.



Embassy of Romania

Pitesti, Romania. Post-World War II urban growth has led to regionwide housing shortages.

TASS from SOVFOTO

Soviet cadets in the classroom. The decline in the proportion of young people has led the region's leaders to worry about filling future military and labor supply needs.

Ethnic Diversity in the Soviet Union

Population growth in the Soviet Union dropped by one-half in the last three decades, from an average 1.8 percent a year in the 1950s to 0.9 percent in 1986. This drop in the growth rate is due mostly to declining fertility—the total fertility rate (TFR), or average number of children per woman, fell from 2.8 in the 1950s to 2.3 in 1983. But the Soviet Union is a vast country comprised of 15 republics and some 125 nationalities. National fertility figures mask sharp differences among the Soviet Union's republics and even sharper differences among its nationalities. Most of the country's fertility decline has taken place in the Russian Republic, which is by far the largest of the 15 republics. Fertility in other areas, particularly those populated by Muslims, has remained quite high. In 1980 women in the Russian Republic and the two other major Slavic republics, the Ukraine and Belorussia, averaged about two births each. The TFR in the Muslim-dominated Central Asian Republics, ranged up to 5.8. This means that the ethnic make-up of the nation is changing: The three Slavic nationalities declined from 76 percent of the total population in 1959 to 72 percent in 1979. Meanwhile, the proportion of Muslims rose from 12 to 17 percent during this same period.

Although the people of the Russian Republic will certainly remain the dominant nationality, low fertility and a relatively high death rate will reduce their share of the total population from 52 percent in 1979 to a projected 47 percent in 2000. Fertility in the fast-growing Muslim republics has begun to decline, but by 2000 these republics are still expected to have rates of natural increases as high as 2.1 percent a year—14 times the projected rate in the Russian Republic.

The underlying causes of these differences in ethnic fertility range from the higher levels of urbanization, housing shortages, and women's education and employment in the northern Slavic and Baltic republics to the traditional emphasis on large families, low rates of divorce, and negative attitudes toward abortion that characterize the cultural differences of the Muslim-dominated republics.

These disparities in growth are becoming issues of greater concern in the Soviet Union since they affect future labor supplies and military personnel. Annual additions to the working-age population will drop sharply during the 1980s and virtually all gains will come from the high-fertility, non-Slavic regions. In these regions levels of education, industrialization, migration, and urbanization are substantially lower than in the Slavic regions. Plans to develop light industry in the regions populated by non-Slavic people will be hampered by their lack of training and poor command of the Russian language.

The Soviet Union's military is the largest in the world, consisting of 4.8 million in 1986 (including 10,000-30,000 women). Most of the Soviet armed forces consists of 18- and 19-year-old draftees; only about 12 percent of men this age escape the required two years of military service. The ethnic composition of the military is the major concern of country leaders at this time. In 1970, 19 percent of potential draftees came from the Muslim republics. By 2000 their share is projected to increase to 33 percent.

This rising dependence on the non-Slavic minorities for military recruitment is seen as a threat to the efficiency of the armed forces. Non-Slavic minority draftees have demonstrated a notoriously poor knowledge of Russian, the sole language of communication in the military. Military efficiency could also be impaired by rising ethnic tensions within the ranks. These problems are likely to become more serious as the year 2000 approaches.

Undoubtedly, housing shortages negatively affect fertility rates. In spite of economic incentives to have children, birth rates are not responding in many socialist countries. Married couples who are forced to live with friends or relatives are reluctant to have children, and if they do, they will be inclined to limit their family size. In 1984, over 50 percent of couples living in Budapest shared living accommodations with their parents. Studies show that housing shortages in the Soviet Union and Eastern Europe have led to more divorces and fewer marriages.

Land and the Environment

The rapid industrialization that occurred in the Soviet Union and Eastern Europe following World War II has sparked serious environmental problems, especially in the most industrialized urban areas in this region. The Soviet Union, GDR, Poland, and Czechoslovakia are all experiencing severe air and water pollution and deforestation. These environmental problems are mainly the result of poorly planned economic development and the tendency of authorities to emphasize economic growth rather than environmental concerns.

The Soviet Union is one of the most heavily polluted countries in the world. Deforestation, destruction of bodies of water, and air pollution confront the country's leaders. Acid rain is damaging forests all over the Soviet Union, and many of that nation's seas and rivers have suffered from industrial pollution. *Eko,* a Soviet publication, reports that smog is so bad in some cities that it is causing birth defects in infants and a rise in the mortality rate. The 1986 meltdown at the Chernobyl Nuclear Power Plant has added to the Soviet Union's environmental nightmares.

A 1984 United Nations report disclosed that the GDR's environmental situation was the worst in Europe. The GDR has fallen victim to massive air pollution affecting 12 percent of the nation's forests. Although the East German government hesitated to acknowledge its environmental problems, the worsening situation has forced the government leaders to act. Since the beginning of the decade the government has formulated policy addressing environmental problems and has displayed a willingness to cooperate with neighboring countries.

Along with the Soviet Union and the GDR, Poland's environmental problems are among the world's most severe. Ecology experts estimate that the water in more than 90 percent of Poland's rivers is too polluted to drink. In addition, air pollution is a major problem in industrial regions; about 20 percent of the population lives in areas where the sulfur dioxide content of the air exceeds permitted levels. Health experts in Poland believe that pollution will result in deteriorating public health: pollution has already been pointed to as the force behind the lowering life expectancy among working-age males.

Although the socialist countries have been reluctant to publicize their environmental concerns, steps have been taken to solve these problems. In the Soviet Union, agencies have been designated to supervise the use and protection of natural resources and some leaders have included environmental protection measures as part of the state plan. Many of the socialist countries have implemented water recycling plans and measures, such as banning the use of leaded gas, to protect air quality. Finally, city and regional planning has improved in an effort to avoid environmental catastrophes by exercising more concern at the development stage.

"In our view, the idea of "zero population growth" . . . is unaccceptable for the Soviet Union. Expanded reproduction of the population in the USSR, and especially in its constituent republics with a low birth rate, is necessitated by the socioeconomic situation, notably the demand for labour. . . ."

—Timon Ryabushkin,
USSR Academy of Sciences

STATUS OF WOMEN

Perhaps more so in the socialist countries than in other developed nations, the position of women in society is the key to understanding fertility trends. Guided by Marxist ideology, the Soviet Union, followed by the Eastern European countries, was among the first nations to declare the equal rights of women with men. But sexism still exists, as do economic conditions which make childrearing a particularly heavy burden for working women.

The 1936 constitution of the Soviet Union declared women's "equal rights with men in all spheres of economic, state, cultural, public, and political life." This commitment to equal economic opportunity corresponds with the nation's reliance on women as coproducers of goods and public services. Women are educated with the expectation that they will work outside the home for a significant portion of their lives. With women's increasing level of education, most presumably would choose to work outside the home, whether or not it is economically necessary.

Embassy of Romania

Chemical factory in Rimnicu Viclea, Romania. Urbanization and industrialization have led to severe pollution and environmental degradation throughout the Soviet Union and Eastern Europe.

Embassy of Romania

Women are crucial members of the region's labor force.

As a result, the women's labor force participation rates in most of the socialist countries are among the world's highest. In 1980, female representation in the paid labor force was 90 percent of male's (and had been since at least 1950). In North America, this figure was only 62 percent in 1980.

But the socialist commitment to equal rights for women works against its goals of increasing fertility. The needs of working mothers have not been suitably addressed in the Soviet Union and Eastern Europe. Readers' letters to the editors of women's magazines in the socialist countries depict societies where child care conflicts with the need to work, where husbands frequently refuse to help with household chores, and where women plead for relief from the triple role of "good workers, good wives, and good mothers." Women's difficulties are often compounded by cramped housing conditions, the lack of time- and energy-saving appliances, and the absence of shopping facilities and convenience services.

In order to increase fertility, country leaders need to develop policy aimed at easing the load of the working mother. In designing the pronatalist measures of the 1960s and 1970s, policymakers of socialist countries encouraged joint parental responsibilities in an attempt to relieve the conflict between women's roles as workers and as mothers. Unfortunately, programs designed to encourage childbearing can also work to the economic detriment of working mothers. For example, prolonged maternity leave for women who elect to stay home for two or three years after childbirth, which is available in some socialist countries, can actually work against women, for it emphasizes sex role differences and can weaken the position of women in the labor market.

The major problem confronting women in the countries of Central and Eastern Europe in the 1980s is how to encourage men to both work in the paid labor force and help in the task of raising children and assuming household responsibilities. How can the political leadership balance effectively and fairly the needs of the country and of its women? Low fertility will probably continue so long as women are needed in massive numbers in the labor force and equality in other areas of life remains unaddressed.

PERSPECTIVES ON POPULATION POLICY

As the 21st century nears, consequences of low fertility are in the forefront of the minds of socialist leaders. These consequences include not only labor and military shortages, but care for the elderly. In the past 20 years many countries have enacted policies to boost fertility—and in the 1980s many of these countries have intensified these policies, since past measures have been less than successful.

One problem with promoting fertility is that most of the socialist countries cannot afford to lose the labor of women. Women's participation in the labor force—they make up almost 50 percent of the work force in many of these countries—is an economic necessity. Country leaders must formulate policies toward easing the burden of childbearing on working women. If not, they will have to choose between losing female workers now, or having extensive labor shortages in the future.

The effect of low fertility on labor shortages is of vital concern to the region's policymakers. The agricultural labor force in the Soviet Union is facing the most severe shortages at the present time. In the recent past, governments have restricted rural-to-urban migration in order to keep young males in the agricultural labor force, which is composed predominantly of females and older people. Because continued shortages are expected in the agricultural labor force, policymakers may be forced to step up restrictions on urban migration.

Another factor which could have a negative effect on the labor force is the increasing mortality among working-age men in the socialist countries. Since official statistics on age-specific mortality are not abundantly available, analysts cannot completely discern the extent of the mortality problem and how or if the socialist governments are addressing it.

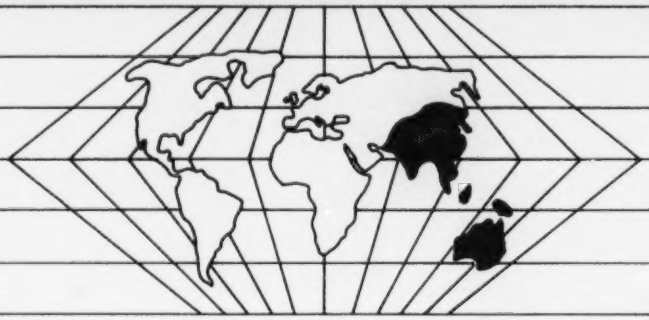
The Soviet Union and Eastern European countries can expect a continued decline in fertility in the coming decades. No improvements in the mortality rates are foreseen—in fact continued increase in mortality is even possible. This being the case, the future holds more declining population growth rates for the region.

In addition, different rates of growth for different ethnic groups and labor force shortages are another major concern for the region. Finally, policymakers will have to address the issue of environmental degradation, which is already among the most severe in the world and can only be expected to worsen.

Population Perspectives: the Soviet Union and Eastern Europe is one in a series of seven regional papers examining population change in the world's regions published by the Population Reference Bureau, October 1986. It was compiled by Kimberly A. Crews and edited by Janine Adams based on two of the Population Reference Bureau's *Population Bulletins*: "The Soviet Union: Population Trends and Dilemmas" (Vol. 37, No. 3), by Murray Feshbach, 1982; and "Eastern Europe: Pronatalist Policies and Private Behavior" (Vol. 36, No. 6), by Henry P. David, 1982. Additional information came from *Socialist Population Politics*, by John F. Besemers, White Plains, NY: M.E. Sharpe, 1980.

The Population Reference Bureau, Inc., 777 14th St. NW, Washington, D.C. 20005, is a non-profit educational organization established in 1929. The Bureau is a source of information on the facts and implications of national and world population trends.

Population Perspectives



Asia and the Pacific

In the 1950s and 1960s world attention focused on Asia and the Pacific region as an arena of internal conflict and international war. In the 1970s and 1980s the Asia-Pacific region drew world attention for a different reason—the rapid economic progress of so many of its countries.

Not all conflict has ended, nor have all countries and people in the region been beneficiaries of the growth process; nevertheless, behind the changing perceptions of Asia and the Pacific is an important economic and social transformation.

Rapid and dramatic demographic change is part of this transformation. In some countries birth rates are still high, but in many population growth rates have fallen and families are smaller. The people of the region are enjoying better health and longer lives; they are increasingly living in urban areas and working in jobs outside of agriculture. Primary school education is available for virtually all children, and the proportion of children attending secondary schools and colleges is climbing rapidly in many countries.

These demographic changes are linked to economic and social change, which includes increased agricultural production, expanded employment opportunities, improved health care, better sanitation facilities, and more knowledge and use of contraceptives.

Similar changes are taking place in most developing areas, but in the rapidly growing developing countries of Asia and the Pacific demographic transformation is occurring more quickly than in other developing regions or in the historical experience of the contemporary developed nations of Europe and North America. This demographic change holds much promise for continued economic growth and a better life; however, the countries of the region and their governments will face difficult new challenges in the coming decades as a direct consequence of this change.

POPULATION DYNAMICS

Perhaps the most pervasive image of Asia outside the region is one of teeming, ever-expanding masses of people. This image seems justified for a region that in early 1986 contained 2.7 billion people, 56 percent of the world's population, and six of the ten most populous countries. Yet one of the most striking changes in Asia in the past 25 years—one that is in sharp contrast with other developing regions in Africa and the Middle East—has been the rapid decline in population growth rates, especially in East Asia and parts of Southeast Asia. Even in South Asia, where birth rates are generally higher, population growth rates are below the world norm for areas at the same income level.

United Nations/ILO

Population and family welfare education class in India.

The diverse nature of the demographic situation in Asia is illustrated by its largest countries—China and India, which together account for two-thirds of Asia's people, and Indonesia, Japan, Pakistan, and Bangladesh, all with populations exceeding 100 million. Except for Japan, the population of each of these countries grew at a relatively high rate of about 2 percent a year between 1960 and 1980. Pakistan, Bangladesh, and India are projected to grow almost as much or more during the last two decades of this century. Indonesia and China, on the other hand, have achieved significant reductions in their rates of population growth, as Japan did earlier.

Population Growth: Fertility and Mortality

The large populations and rapid rates of growth that have characterized Asia are a modern phenomenon, a part of the process of moving from high fertility and mortality rates (large proportions of both births and deaths) to low ones. This process is called demographic transition.

Following World War II, death rates declined steeply in Asia, as in most of the developing world, the result of improved standards of living, the increasing use of modern sanitation and water supply, the expansion of medical facilities, and the spread of education and health care knowledge. But for some time birth rates continued at high levels. The increase in the gap between births and deaths resulted in rapid population growth.

Women in this region are bearing fewer children now because birth

This regional paper on Asia and the Pacific considers the countries of Asia, as well as those Pacific islands which are members of the U.N. Please note that the Asian countries of East Timor, Hong Kong, and Macau are not members of the U.N. The map was taken from *Asia-Pacific Report: Trends, Issues, Challenges*, East-West Center, Honolulu, 1986. Used by permission.

Different statistical sources can have different regional definitions, so be careful when comparing regional data.

control has become more available and the socioeconomic situation has improved—incomes have risen and more women have had access to schooling and jobs outside the home. Because of the high fertility in the recent past, however, the proportion of women of childbearing age in the population is still high. Therefore, although women in this region are now having smaller families, so many women are having children that the number of births is slow to fall.

The major Asian countries are at different stages in this process of demographic transition. The population of South Asia is still growing rapidly; although birth and death rates have both declined, the gap between them has not been reduced. Because fertility remains high in the three major South Asian countries—Pakistan, Bangladesh and India—their combined populations will increase by an estimated 440 million between 1985 and the end of the century, reaching a total of 1.4 billion.

The countries of East and Southeast Asia stand in contrast to South Asia. Japan's demographic transition occurred earliest; its birth rate fell steeply in the 1950s after a brief postwar baby boom. Since the 1960s South Korea, China, Singapore, Thailand, Malaysia and Indonesia, also have all experienced rapid declines in birth rates. Once these rates began to fall, they did so precipitously. At the same time, life expectancy climbed rapidly. No other region has experienced such rapid demographic change.

International Migration and Refugees

While the movement of people from rural to urban areas is relatively unrestricted in most of Asia, movement between countries is severely restricted. International migration is only significant for a few very small countries such as Tonga or the Cook Islands, where there has been considerable emigration to New Zealand and the United States. Political conditions also have produced large numbers of refugees, as in the countries of Indochina. Some of the world's largest outflows of refugees have come in recent years from Asia and the Pacific, including Vietnam, where about 49,000 people left each year between 1980 and 1985, and South Korea and the Philippines, each losing about 29,000 emigrants per year during the same period.

Far larger than these flows, however, have been those of temporary migrants who left Asia to find work in the Middle East, estimated in 1983 at about 2.5 million workers, primarily from India, Pakistan, South Korea, and the Philippines. This represents only a small fraction of Asia's work force, but it has had considerable economic impact. With the 1986 drop in oil prices, however, this migration has slowed.

Other migrant trends in Asia have economic significance beyond the relatively limited numbers of individuals involved. Filipino and South Korean migrants to the United States, for example, are often highly trained workers such as doctors or nurses. Refugees leaving Indochina have included a significant proportion of persons engaged in commerce and in public administration under previous governments.

CHALLENGES FOR THE FUTURE

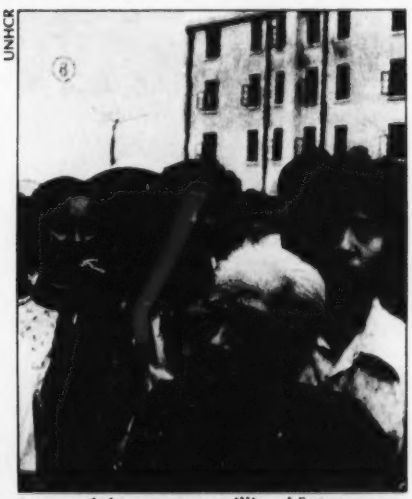
Demographic change presents a variety of challenges for countries in the Asia-Pacific region. Some will have growing numbers of school children to educate; others will see the elderly portion of their population expand. A key issue in South Asia is increasing economic growth and reducing population growth to achieve higher living standards. Conserving and protecting their natural resources are a major challenge in all the countries of the region.

Changing Age Structures

Rapidly growing populations are young populations. In 1980 children under age 15 made up more than 40 percent of the populations of Bangladesh, Burma, India, Malaysia, Nepal, Pakistan, the Philippines, and Thailand. In contrast, children made up only 22 percent of the U.S. population that year. Countries with youthful populations must support proportionately more classrooms and each working person's wages much support proportionately more dependents. While all Asia-Pacific countries are educating a greater proportion of their youth than they were in 1960, low-income countries such as Bangladesh and Pakistan can afford to educate less than two-thirds of their primary school-age children.

However, as people live longer and have fewer children, the age distribution of a population changes significantly. This aging has economic, social, and cultural implications for the future that have not yet been fully assessed.

The decline in fertility in many East Asian societies will lead to a high proportion of elderly in the 21st century. This transition will occur rapidly in Japan and later for South Korea and China, where fertility declines have been steep. But even in countries such as Nepal and India the number of elderly will double over the last two decades of this century because of increases in life expectancy.



UNHCR

Some of the quarter-million Vietnamese refugees in China.

Today, a larger proportion of the Japanese population is in its prime productive years than in any other large industrialized country. Early in the 21st century, however, Japan will have the smallest share. With some 16 percent of its population in the senior citizen category by the year 2000 (compared to 12 percent in the United States today) and 22 percent in 2025, Japan faces proportionately higher medical and social security costs. The Japanese government is now beginning to grapple with the need to make substantial changes to assure that its social security system continues to function.

Coping with Poverty

Despite the rapid economic growth of a number of Asia-Pacific countries, the vast majority of the people in the region are poor. More than 75 percent of Asian and Pacific people live in low-income countries, principally China and the South Asian countries where per capita income is below $400 annually. Only about 5 percent of the region's people live in high-income countries such as Japan and Australia with per capita annual incomes over $7,000. An issue of overriding importance, therefore, is whether the economic growth process—so successful in Japan and successfully underway in several smaller Southeast Asian countries—can be sustained and duplicated elsewhere in the region.

No clear consensus exists among economists on the prospects for economic growth among the poorer countries of the Asia-Pacific region. Some see the export-oriented policies of Japan, Taiwan, and South Korea as a model to be followed by other countries in the region. Others are more pessimistic, arguing that the climate for economic growth is different today because foreign aid is limited, the world economy is stagnated, and markets for export goods are saturated. Most economists agree that Asia's poorer countries, particularly those of South Asia, face enormous challenges, many demographic in origin.

Most of the nations of South Asia have low per capita incomes and rank among the poorest in the world. Economic growth in these countries is constrained by a large and rapidly growing population that is predominantly rural and poor, with a large proportion of unskilled and illiterate workers, and a huge gap between the incomes of rich and poor. Foreign aid has helped South Asia make remarkable progress over the past two decades in feeding its people but industrial growth and the creation of urban jobs has been disappointing despite heavy investment in some countries. Moreover, ethnic violence and other political difficulties have hurt the economies of several of the subcontinent's countries.

"Our birth rate has already upset the balance between people and resources, between the hopes and aspirations of the people and the opportunities available, and as development grows, people want more for their children."

—Indira Gandhi

The labor force in South Asia is projected to grow from 298 million in 1980 to 464 million by 2000, an increase of 30 percent in just 20 years. Creating enough urban industrial jobs to absorb the growing work force appears to be virtually impossible over the next decade if recent economic trends continue. Agriculture—which now employs 70 percent of South Asia's workers—will have to absorb the new labor force entrants, putting stress on the land and lowering productivity if new investment is not made in rural areas.

Life Expectancy and Health

The health of people in the Asia and Pacific region has improved greatly during the past two decades. Life expectancy at birth in Japan, Australia, and New Zealand paralleled or exceeded the gains made in Europe and North America, now av-

Status of Women in Asia

Many Asian cultures, particularly in the South Asian countries of Pakistan, Bangladesh, and Nepal, are patriarchal—that is, the father or eldest son makes most decisions, controls the family's finances and is the legal owner of the land. As a result, women's social position is severely limited. In East and Southeast Asia, the patriarchal traditions are less strong, though marriage is an important institution—virtually all women there marry—and women who do hold wage-paying jobs earn lower salaries and work longer hours than men do.

Motherhood, particularly the birth of sons, enhances the prestige of women in Asia's developing countries. A woman gains security and authority by bearing sons who will show her respect and care for her in old age. The value of baby girls is much lower, though having a girl child is preferable to having none at all. In South Asia this emphasis on motherhood and having sons leads to large families. Many observers believe that only dramatic social change—more girls attending school, broadened work opportunities for women and alternative forms of social security—will lead to lower fertility in South Asia.

In developed countries employment outside the home and access to an independent income have been important factors in the improved status of women. While many women in developing countries engage in activities beyond housekeeping, they usually work as farm laborers, street vendors or as maids. Much of women's work is in the form of unpaid family help, often on the family farm. Thus, work is often neither an emancipating experience nor a socially valued role.

eraging over 75 years. Most developing countries in the region added 10 years to life expectancy between 1960 and 1980. Better sanitation and clean water, along with improvements in health care and nutrition, led to the decline in early deaths. There is still room for improvement, however. While life expectancy at birth is estimated to have risen to 66 in East Asia, it is still only 58 in Southeast Asia and 52 in South Asia.

The low life expectancy of many South Asian and other countries in the region reflects high infant mortality rates. In several of the most populous countries of the region, more than 10 out of every 100 babies die before their first birthday. By contrast, in Japan and Australia, that rate is less than 1 out of every 100 babies. Countries that have given high priority to primary health care, such as China, Sri Lanka and Malaysia, have longer life expectancies and proportionately fewer infant deaths, even though they are not among the richest countries of the region.

Food Production

Present demands of the population of the region for food are huge. For the most part, they are being met by national production. Imports account for less than 10 percent of the region's food consumption. As recently as the mid-1970s many analysts believed that the region could not grow enough food to feed its population. The past decade, however, witnessed remarkable progress in food production. A combination of improved management of land and water, better seeds, and more fertilizer reduced many of the constraints on production increases. China, India, and Indonesia have all become largely self-sufficient in basic food needs, and even Bangladesh has made substantial progress.

Nevertheless, as populations grow and diets become richer (people can afford to consume more meat, for example) there will be increased demands on agriculture. Today annual production of cereals (mainly rice and wheat) in the region totals about 685 million metric tons. If present consumption trends continue, the larger and richer Asia and Pacific populations of some 3.9 billion people in the year 2010 will require 1,075 million metric tons of cereals per year.

Lynn Millar-Rapho-Guillamette

"Women's work" in Asia often takes the form of farm labor.

Despite the region's good record in meeting growing food needs in the past decade, increasing the total food supply in a region already intensively exploiting many of its food resources is a significant challenge.

Land and the Environment

In many Asian countries, forests are frequently the only lands available for use that are not heavily populated. They are in demand for a number of purposes—logging, harvesting fuel wood, and agriculture. Often they are government-owned or public lands, but government control and regulation are frequently rudimentary.

Forests cover almost half of the land area of the tropical and subtropical Asian countries (all those in South Asia, and some in Southeast Asia and East Asia.) Each year hundreds of thousands of acres are logged or cleared for a variety of purposes. On average, countries are losing about 1 percent of forested land per year, but in some countries forests are disappearing at a much faster rate.

The forest areas of Asian countries that do not have tropical climates such as Japan, North and South Korea, China, Australia and New Zealand are generally much smaller. All these countries have substantial tree-planting programs.

The poorer countries of the region cannot afford to protect their forest resources for future generations. Timber is a valuable export for

several East and Southeast Asian nations; in many of the region's poorer countries forests are cleared to increase food production. But exploitation of forests can lead to long-term economic damage. The removal of large forests can lead to heavy soil erosion that causes agricultural productivity to decline and sediment to build up in dams, making them unusable for drinking water and electric power. The clearing of forests also has unpredictable effects on climate conditions and may lead to the loss of unique plant and animal species that may be important in the production of pharmaceuticals and other products.

Another source of pressure on forests comes from the demand for wood for heating and cooking. The U.N.'s Food and Agriculture Organization has estimated that about 80 percent of all energy (other than human and animal) used in rural areas of developing countries comes from wood. In Asia heavy cutting of forests for firewood is occurring in China, India, Nepal, and Pakistan.

Perhaps the most serious problem at present is in Nepal, where it is estimated that 87 percent of the fuel consumed for energy comes from forests. As the population increases, ground-protecting trees are disappearing from the steep, erodible mountain slopes, and topsoil is being washed into rivers and deposited across the border in India, Bangladesh, and the Bay of Bengal.

Urban Growth

The populations of Asia are becoming increasingly urbanized. Currently, 25 million people are being added annually to the urban populations of Asia and the Pacific. Urbanization is part of a worldwide process that is linked to increased agricultural productivity which leaves more workers free to seek jobs in manufacturing and services, usually in urban centers.

Although every country in the region is more urbanized today than in 1960 and will be even more so by the year 2000, the level of urbanization varies widely in the region. Nearly 80 percent of Japan's citizens live in urban areas, while only 6 percent of Nepal's population is urbanized.

Australian Information Service

Aerial view of Sydney, Australia. Japan, Australia, and New Zealand, unlike the rest of Asia and the Pacific, are considered economically "developed" nations.

The largest cities (often the capitals) in developing Asian countries have been growing rapidly—many tripling or even quadrupling their populations since 1960. By the year 2000, Asia is expected to have 11 urban areas with populations in excess of 10 million, compared to only two in 1960.

Some East Asian cities such as Tokyo, Seoul, and Shanghai have maintained effective urban management despite their huge size. However, these cities have serious air pollution problems and relatively little park space, and much potential work or leisure time is used to commute. In most cities in Southeast Asia, and particularly in South Asia, the urban problems of pollution, inadequate water and sewage facilities, congestion, slums, unemployment and crime are much greater, and in comparison to their Northeast Asian counterparts these cities have fewer resources to cope with these problems. Moreover, unlike the cities in East Asia's more homogeneous societies, South and Southeast Asian cities are often meeting grounds for people of different ethnic or communal origins; they can be and have been cauldrons of ethnic tension and social unrest.

In the smaller and medium-sized countries of Asia much of the internal migration has converged toward a single metropolitan area, such as Seoul in South Korea, Manila in the Philippines, and Bangkok in Thailand. This places tremendous strains on sustaining the quality of life in the primary city and depletes resources—both skilled people and funds—available to the countryside and smaller towns.

Despite appalling urban conditions in some countries, people continue to move to urban centers because there are even poorer economic prospects and fewer public services (health clinics and schools, for example) in the countryside. Even when urban employment prospects are dim, the rewards for those who do find jobs are so great compared to what is available in the rural sector that migrants from the countryside are willing to accept the risk of being unemployed. Because social unrest in the cities often appears more threatening to governments, and perhaps also because officials and economic planners are themselves urban dwellers, more government money is often spent on urban development. A key policy concern will be to provide for urban

> *"We tell participants [of family health seminars] that to have a better quality of family, the family should be small in size. With a small size, the family can be in good health, happy, and contented . . ."*
>
> —*Mayor Andres Montejo, Malalag, Davao del Sur (Philippines)*

World Bank

Workers in a clock factory in India, where leaders are striving to develop small- and medium-scale industries.

development without imitating economic opportunities in the rural areas.

PERSPECTIVES ON POPULATION POLICY

While some Asian and Pacific governments encourage population growth, most regard rapid population growth as a serious problem. Family planning efforts are regarded as an integral part of the solution to this problem.

Asia's two most populous countries, India and China, have put the most effort and money into family planning programs. India has the oldest consistent family planning effort in the developing world, begun in 1952. China's one-child program is the most far-reaching population program and the most controversial in its methods. These two programs help illustrate the effectiveness of family planning as well as some of its limitations. Research suggests that women in countries at India's or China's level of development (per capita income of $260 and $310 respectively in 1984) usually have an average of 6 children each. China's 1982 rate of 2.1 births per woman and India's rate of 4.6 are considerably lower than countries at the same economic level.

Over the longer term it is doubtful that family planning alone can maintain these reduced rates of population growth without other policies to improve standards of living. In both India and China (and most low-income countries in Asia and the Pacific) there remain important incentives for couples (especially in rural areas) to have more children. Children, especially males, have been valued as farm hands or workers in small family businesses, and as their parents' "social security." Many Indians, for example, consider it necessary to have a minimum of two male children; to achieve this couples must average at least four children.

"People are the foundation of the nation. If that foundation is firm, then the nation will enjoy tranquility."

—3,500 year old Chinese proverb

Several richer countries in East and Southeast Asia have successfully used economic incentives and disincentives to encourage couples to have fewer children. Such incentives include free tuition and medical care to two-child families if one parent is sterilized, paid maternity leave for the first two children, and tax breaks for small families.

The United Nations projects that the Asia and Pacific region's population will not stabilize (reach a point where births equal deaths) until the end of the 21st century. Most of the additional population of the region will be living in South Asia and Southeast Asia—which together will have an eventual population of more than 4 billion—rather than East Asia. India will surpass China as the world's most populous country. As long as it continues, this population growth will be a source of political, economic, and social strains, especially in South Asia and those parts of Southeast Asia where rapidly increasing population is combined with slow economic growth. The progress the low-income countries of Asia make in the future will have enormous implications for the rest of the world.

Population Perspectives: Asia and the Pacific is one in a series of seven regional papers examining population change in the world's regions published by the Population Reference Bureau, October 1986. It was compiled and edited by Paola Scommegna based on a portion of the *Asia-Pacific Report* written by John Dixon and Andrew Mason of the East-West Center, 1777 East-West Road, Honolulu, Hawaii. Used with permission. The box on women's status was written by Janine Adams of PRB.

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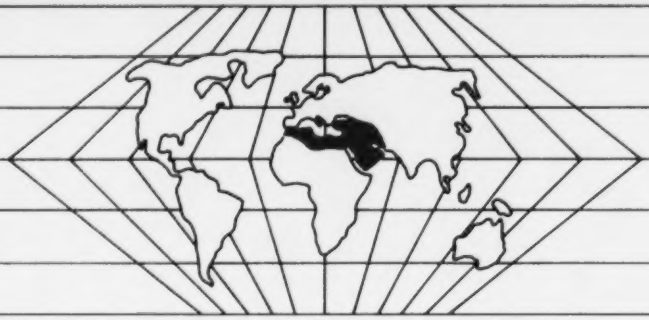
Population Perspectives



Middle East and North Africa

The Middle East is a region of contrasts: between the region's deserts and the fertile Nile valley, between the richest and poorest (the United Arab Emirates and Afghanistan) between tiny Bahrain and the massive spaces of Saudi Arabia and Algeria, and, finally, between conservative and radical political regimes.

The region possesses the world's largest oil reserves, though the deposits are not evenly spread among countries. Oil production has brought tremendous wealth to some countries in the region, and it has been a source of employment for workers from other countries with rapidly growing labor forces and slow economic growth.

The effects of the 1986 drop in oil price—to the lowest level in 13 years—were being felt by all countries in the region, though in different ways. The lost revenues forced oil-rich countries, such as Kuwait and Oman, to cut back on construction projects and social spending or finance these programs at a loss. Migrant workers from countries like Egypt sent home smaller pay checks or returned home to joblessness and poverty.

With these differences go some similarities. With only few exceptions, such as Israel and Cyprus, countries in the Middle East are demographically and socially similar. They have high rates of population growth and a high proportion of young people in their populations. Most people marry, many at an early age, and have large families. Agriculture is the basis of community life, though their cities are growing rapidly.

These demographic trends present policymakers in rich and poor countries alike with numerous challenges: protecting agricultural and water resources, managing city growth and ensuring the health of their populations. The region's population growth rate of close to 3 percent a year is among the highest in the world.

POPULATION DYNAMICS

With a population of 286 million in 1986, the Middle East contains 6 percent of the world's total. United Nations projections indicate that the population of the region will grow to 466 million by 2000, a 40 percent increase in 14 years. Because of the great deserts which occupy a large portion of the region, the habitable areas of the Middle East are densely populated today.

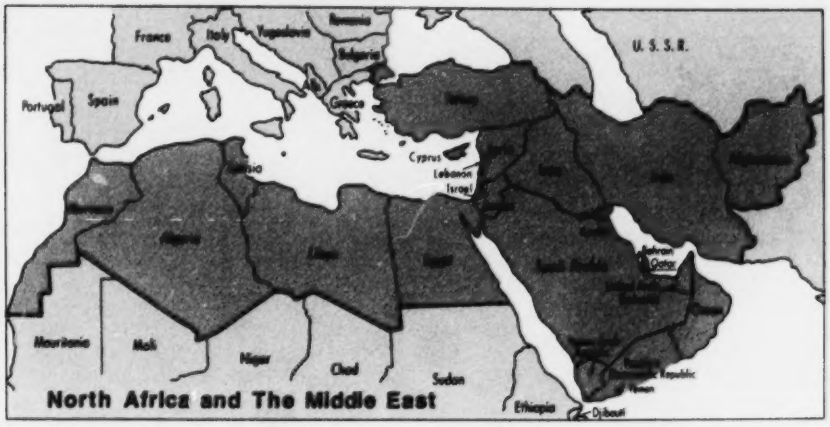
Throughout recorded history, people have clustered in the well-watered, fertile valleys of the Nile, Tigris, and Euphrates rivers, and along the fringe of the Eastern Mediterranean. Uniquely situated as a land bridge between Europe, Asia, and sub-Saharan Africa, the region developed as a site for commerce and trade. The flow of ideas that accompanied these activities enhanced the role of many Middle Eastern countries as centers of learning and may, in part, explain how the region became the source of three of the world's major religions: Islam, Judaism, and Christianity.

Unfortunately, the Middle East's wealth and location have made the region an attractive target for invaders throughout history. In more recent times the industrialized countries of Western Europe have had a considerable influence over the region. A contest for access to the region's resources continues among the world powers today.

The dominant religion in the Middle East is unquestionably the Muslim faith. Founded by Mohammed in the 7th century, Islam spread rapidly throughout the Middle East, into Africa and as far east as Indone-

United Nations

Traveling nurses and midwives provide valuable health and family planing assistance to rural families.



This regional paper on the Middle East and North Africa includes the countries of eastern Asia and African countries north of the Sahara, shown at left. Please note that Western Sahara is considered part of Morocco, and that Gaza is not a member of the U.N. Different statistical sources can have different regional definitions, so be careful when comparing regional data.

sia and the Philippines. With the exceptions of Cyprus, Israel and Lebanon, all states in the region have populations that are more than 90 percent Muslim.

Religion is a source of considerable divisiveness in the region. The establishment of Israel as a Jewish homeland in what was formerly the British-mandated territory of Palestine in 1948 has been a source of continued conflict. In Lebanon political power is divided along overtly religious lines. The factions in Lebanon's current hostilities represent various Christian and Muslim groups within the population.

The other source of religious dissension in the region comes from within the Muslim community. There are two main branches of the Muslim faith, Sunni and Shiite. Today roughly 90 percent of Muslims are Sunnis, but Shiites are in the majority in Iran and North Yemen, and are substantial minorities in Iraq, Syria, Turkey, and Lebanon. In addition, the Muslim faith is being tried by industrialization. Although some Muslims attempt to adapt their religious practices to changes in economic and social circumstances, there are others who stress a return to fundamentalism such as the religion-based government in Iran.

Population Growth: Fertility and Mortality

Fertility has been and still is extremely high in the region. Women in the region are likely to bear about six children on average, as opposed to two children per woman in the industrialized regions and four children per woman as a global average.

High fertility is the result of universal and early marriage and cultural attitudes that favor many children. A family's prestige in the community is linked to the woman's fertility. Children are needed to work on family farms and tend livestock. Contraception is not yet widely practiced.

However, women in Israel and Cyprus—where Muslims are not the majority—average between 2 and 3 children. And in Lebanon, where more than 40 percent of the population is not Muslim, women bear an average of about 4 children each.

Fertility in predominantly Muslim countries has not declined with improving living standards as it has in other regions of the world. Despite increases in income and literacy

Throughout the region death rates have fallen in recent decades because of immunization, better sanitation and other public health measures. Because of the large gap between the declining death rates and still high birth rates, the rate of natural increase (the birth rate minus the death rate) was 2.8 percent in 1986, compared with 2 percent a year for the developing world as a whole. If this rate were to continue, the region would double its population in 25 years.

Because more children now survive infancy and because high fertility has been sustained for many years, children under age 15 make up well over 40 percent of the population in the Arab countries of the region. Such a high proportion of

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"The Government pursues a consistent policy aimed at achieving birth control simultaneously with improving living conditions of the population through a comprehensive socio-economic development strategy, as the break out of this vicious circle is imperative to Egypt's demographic situation."

—Kamal Hassan Ali,
Prime Minister of the Arab Republic of Egypt

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families have remained large. This fact suggests that, unlike the case in Europe, economic development alone will not reduce fertility among Muslims—active family planning programs are necessary. In fact, those Arab countries (Tunisia, Morocco, and Egypt) that have seen a decline—however slight—in their fertility have active family planning programs.

dependent young people places considerable constraints on economic development as funds must be spent to educate and provide health care for this large group. Even if women begin having fewer children, the population of the region will continue to increase for several decades because this large group of children will soon reach their childbearing years.

International Migration and Refugees

Waves of migrants have moved from poor to rich countries within the Middle East since the oil boom years of the early 1970s. While the 1986 drop in oil prices slowed this migration, experts do not expect these flows to stop. The full impact of the price decline on migration remains to be seen.

In recent years, migrants from the non-oil-producing countries of Jordan, Lebanon, Syria, and North and South Yemen have found work in the oil-exporting countries of Kuwait, Qatar, Saudi Arabia and United Arab Emirates. These major population movements have resulted in unique situations in both receiving and sending countries. In most of the receiving countries, approximately two-thirds of the labor force is now non-native, whereas in most of the sending countries more than a quarter of the labor force works abroad.

Migrants from countries outside the region—India, Pakistan, Thailand, South Korea—also have joined the influx to urban centers in oil-rich countries. Even more than the earlier waves of Arabs, these workers have sparked concerns about the cultural and political change their presence might inspire. Arab migrants had at least shared a common language and religion. Because of these concerns, controls have been enacted to protect against long-range changes. Countries limit migration using selection standards that favor young, single males. Migrants are forced to return home to marry and are prevented from returning once they have wives and children.

Workers from within the Middle East region have also left to seek jobs in Europe. There are nearly 2 million Turks living and working in Western Europe, almost three-quarters of them in West Germany.

A population problem unique to the Middle East is that of the Palestinian people. The creation of the state of Israel in 1948 led to the exodus of approximately 590,000 Palestinians who are now living as refugees in and outside the Middle East. More than 2 million Palestinian refugees—a number that includes the original refugees and their descendants—have registered with the United Nations Relief and Works Agency for Palestinian Refugees (UNRWA). They reside mainly in Jordan, Syria, and Lebanon. The demographic impact of this additional population creates great pressures on these host countries.

Afghanistan is a new source of refugees within the region. Since the Soviet invasion of Afghanistan in 1979, more than 1 million Afghans have crossed the border into Pakistan.

While other countries in the region seek to limit or control immigrants, Israel has an open-door policy for Jews worldwide. In the three years after Israel was established in 1948, the Jewish population doubled from 650,000 to 1.4 million. In recent years immigration has slowed somewhat because of the country's economic problems. During the 1970s, the largest proportion of immigrants came from the Soviet Union. Of the 47,000 immigrants arriving in Israel between 1980 and 1982, 24,000 came from Europe, 14,000 from the United States, and the rest from Asia or Africa.

CHALLENGES FOR THE FUTURE

Most people assume that population problems arise only where rapid population growth puts pressure on resources such as food and land. While rapid population growth in countries with limited resources remains one of the most serious population problems, population puts pressure on countries rich in resources as well. Such pressures stem from the unplanned growth of cities, and strains placed on education, health, and social services.

Afghan refugees work on agricultural projects at the Iranian refugee village of Kazem-Abad.

Urban Growth

Population in most of the region's cities has been growing about twice as fast as that of the region as a whole. The rapid growth of the urban population is the result of both natural growth (more births than deaths among urban people), rural-to-urban migration, and migrant workers from outside the country. Many communities consist of only a few hundred to a few thousand people isolated from social services, prompting migration to cities. Also, the amount of agricultural land available per person in rural areas in some countries, notably Egypt, has been decreasing so it is becoming more difficult to support the rural population. Therefore, the rural inhabitants are being pushed to the cities to make a living. Most economic activity occurs in cities which usually promise better job opportunities, better education facilities, and higher living standards.

In all cases, the expansion of the region's cities has been unguided, uncontrolled, and unplanned. Population growth aggravates the burden on already inadequate housing, sanitary facilities, schools, hospitals, roads, energy sources, and other public utilities. Further it contributes to the deterioration of the environment. In general, the more educated and better skilled and most talented workers are leaving rural areas to search for jobs in cities which has contributed to a wide gap between the income and life styles in rural and urban areas. In addition, migrants to urban areas are usually younger who leave behind the older people to farm. A decline in productive farm labor can lead to a drop in food production, forcing countries to import costly foods.

Labor Force and Employment

Despite rapid urban growth, agriculture is the way of life for a majority of the population in almost all of the countries of the Middle East. In the poorer countries of the region, agriculture is also the main source of income.

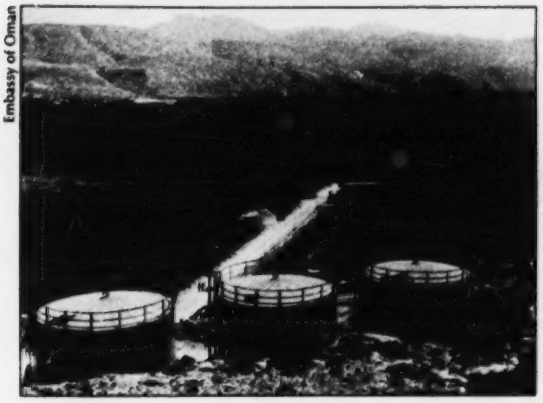
Agricultural production per worker has been declining since the early 1970s in many of the region's countries. As jobs in the oil-rich countries dry up—in both the oil industry and construction—because of the drop in the price of oil, much of the new labor force entrants in the region's poorer countries will have to find jobs in agriculture.

The labor force in the region is expected to grow from about 150 million in 1985 to almost 250 million in 2000, a more than 50 percent increase in 15 years. The oil-producing countries welcome labor force growth as they plan to replace migrant workers in their labor forces with natives. This switch will put further strains on the poor countries in the region whose economies depend on the paychecks migrant workers send home to their families. The expected result of this loss of jobs and income is increasing unemployment.

". . . We are encouraging population planning as a major tool to help us reach a satisfactory accommodation between the available resources and the legitimate expectations of our people for a better present and a promising future. . ."

—His Majesty, King Hussein of Jordan

Israel's economy is unique in the region. Because of its lack of fertile soil, water, minerals, and oil, Israel has diversified its economy to include services, research and high-technology manufacturing. Israel has been able to ensure jobs for virtually all its labor force, which has helped prevent major social conflict among the country's diverse ethnic groups. Israel is dependent, however, on large amounts of aid from the United States and has a very large foreign debt.



Embassy of Oman

Oil storage tanks at the Hormuz Strait south of Iran

Food Production

Though food production increases in the Middle East region have kept pace with population growth, no country in the region currently produces enough food to feed its population at the consumption level demanded. Many countries in the Middle East import more than half their food supply. The smaller, oil-exporting countries have outgrown their capacity to be self-sufficient in food production. They currently purchase food through revenues gained from their oil exports.

Food supply considerations have become critical for those countries which have high population densities and lack oil income. The cost of importing food is an economic drain which diverts funds that could be used for other economic development purposes.

In order to ensure that rapid population growth does not outpace food production, modern agricultural techniques—fertilizers, pesticides, improved seed varieties and conservation—will have to be employed throughout the region in future years. Even if these techniques were used throughout the region, 12 Middle Eastern countries would still not be able to feed their future populations, according to a report from the U.N.'s Food and Agriculture Organization. Six of these countries are oil-rich Gulf States that can afford to import food. Another two—Israel and Lebanon—have diversified economies and relatively slow population growth. Prospects for the remaining four countries do not look good: Afghanistan, North and South Yemen, and Jordan all use little fertilizer, have low average crop yields and very high population growth rates. Unless population growth slows, these countries may become dependent on food aid in the future.

Land and the Environment

The biggest constraint on the Middle East's food production capacity is its climate. All countries in the region are classified as water-short, based on the amount of water the vegetation requires. By comparison, parts of the southwestern U.S. are also water-short, while the northeastern U.S. is classified as water-rich.

Water shortages, particularly in Middle Eastern cities, occur frequently. But the unpredicatability of the region's rainfall also constrains food production. Virtually all countries in the region are among those where rainfall varies the greatest from year to year. This leads to good harvests some years and poor harvests others.

Lack of rainfall and overgrazing of livestock also lead to soil erosion, as has been the case in northern Africa in recent years. These rangelands sustain livestock and support nomadic peoples, who in Afghanistan, for example, make up 16 percent of the total population. Resource management projects—replanting of trees, shrubs and grasses and limits on grazing—are being considered or are now under way in many of the affected countries in the region.

Education

Educational facilities and staff grow much more slowly than the population in non-oil producing countries, because they cannot afford to expand their systems to keep pace with population growth. Not only does rapid population growth present a challenge for training teachers and building facilities, but countries' own goals of increasing educational opportunity by enrolling more girls or requiring more years of schooling makes training teachers a daunting prospect.

Health and Life Expectancy

While the health of the people of the Middle East has improved since 1950, great differences in life expectancy exist within the region. Israel, Cyprus, and Kuwait have life expectancies at birth of more than 70 years, similar to those of industrialized countries in North America and Europe. Lebanon, Bahrain, Jordan, and the United Arab Emirates also have high life expectancies. Life expectancy in the region's North African countries averages only 57 years; in both North and South Yemen it is only 48 years. Afghanistan's life expectancy of 37 years is one of the lowest in the world. The difference in life expectancies that separates these countries reflects the different levels of economic development within the region and the high rates of infant and child deaths.

High infant and child mortality rates are one important reason for low life expectancy in many countries of the region. In the first year of life children are highly susceptible to disease. Adequate health care and nutrition are crucial. Such services are in short supply throughout the region. Deaths to infants under age one average more than 90 per 1,000 live births in half the countries in the region. For Afghanistan, an infant mortality rate of 194 per 1,000 live births means that one out of every five babies dies before its first birthday. By comparison, infant mortality rates are 10 or less in North America and Western Europe and under 15 per 1,000 in Israel and Cyprus.

Among the region's poorer countries, health care systems, already inadequate, have been further taxed by rapid population growth. The increases in numbers of people combine with slow economic growth to make it difficult to expand or improve health services. Most countries have shortages of physicians, nurses and paramedical workers. With the drop in oil prices, oil-rich countries are going into debt funding their health care systems or are cutting back on these services.

The rapid population growth experienced by most countries in the Middle East affects health in two other ways. First, prolonged high fertility, as among Arab women who average about six children each, means a high proportion of children in the population—the group with the highest illness and death rates in poor countries, and hence the group with the greatest need for health services. Second, high fertility and pregnancies in rapid succession are linked to high death and sickness rates among children and their mothers.

Finally, a discussion of death rates in the Middle East cannot ignore war, which is sure to have an effect on a country's life expectancy and age distributions within the population. In the war between Iran and Iraq, 250,000 deaths and another 700,000 casualties have been reported since the war began in 1980.

"Our population policy is based on a revolutionary class concept that takes into consideration the fact that population should represent complete balance between the provision of material and spiritual welfare, on the one hand, and the use and enjoyment thereof, on the other, through the participation of population in the management and direction of political, economic and social life totally free of any form of class exploitation or social injustice."

—Ali Nasser Mohammed,
Secretary-General of the Central Committee of the Yemeni Socialist Party, Chairman of the Presidium of the People's Supreme Council and Prime Minister

THE STATUS OF WOMEN

Muslim society has a tradition of male dominance. Women's rights and levels of participation in society are considerably restricted among the large traditional segments of these societies. Activities which might bring women into contact with men outside their families are frowned upon. This is reflected in some of the world's lowest female

UNICEF

Young women from the Yemen Arab Republic receive secretarial training.

labor force participation rates. Most women are not prepared or expected to enter the work force.

Acceptable roles for women center on work in the home, with motherhood given especially high status. Few women remain unmarried and most marry at young ages. Great stress is placed on having male children. The failure to fulfill this goal can cause a husband to consider a new wife.

"A nomad woman I met in a public health clinic near Sfax Tunisia, told me that she had had ten children and then obtained an IUD despite her husband's objections. When I asked why he had objected, she said: 'My husband used to say that it isn't normal to avoid a life that you are destined to have. He said that if I had been given a potential to bear a certain number of children, it was necessary to bring them into the world. He said I didn't have the right to prevent it—that I was like a chicken with a certain number of eggs to lay, and that I had to lay them. He said it would be a sin not to. My husband at first didn't know that I had an IUD. I didn't want any more children. My health wouldn't stand it. Now he agrees because they talk about it on the radio.'"

—Third World Women Speak Out, *by Perdita Huston (New York: Praeger, 1979)*

Although a higher proportion of Arab women are enrolled in high school and college than was true a few decades ago, there is still a large gap between the education women receive and that of men. Boys have more opportunities than girls at every level of education. Throughout the region, more than half the women are illiterate. For women who do earn university degrees, the pressure to be active in the labor force and yet maintain traditional values is a source of great frustration.

PERSPECTIVES ON POPULATION POLICY

Population policy is the statement of an intention regarding a present or foreseen population problem. It may be related to population growth, composition, or characteristics, or to distribution, migration, or settlement. Perceptions and readiness to adopt policies vary throughout the region.

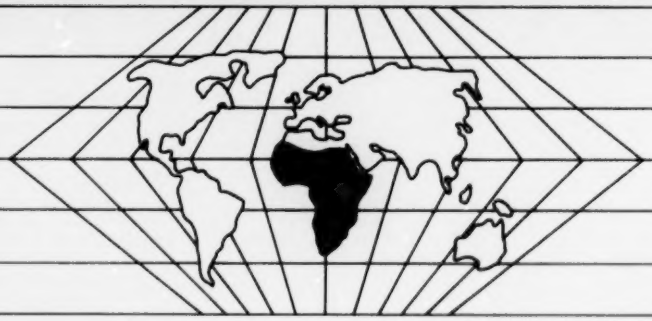
The oil-rich countries encourage population growth through increasing fertility, reducing mortality and controlling migration. Such policies are made after weighing the small size of their population, their economic resources, and aspirations for social and economic development. These policies emphasize labor force planning and some countries, such as Bahrain, have family planning programs to help improve health through birth spacing.

In Egypt, Morocco, and Tunisia the governments are concerned with the consequences of rapid population on social and economic development. Egypt and Tunisia have national family planning programs. In Morocco, family planning information is provided by public health services and a voluntary family planning organization.

Most Middle Eastern countries are working to improve their women's health services and trying to invest in rural areas in order to stem the rapid growth of cities. Many political and cultural obstacles continue to frustrate family planning efforts, however. Children are needed to work on family farms and businesses, and to tend livestock. Also, since power is often equated with numbers, military leaders in particular have strongly resisted any attempt to limit population growth, especially since the creation of the state of Israel in 1948. Many ethnic groups, such as the Palestinians, see birth control as an attempt of outside groups to limit their numbers and weaken their strength. Finally, some Muslim groups argue that various religious injunctions exist against family planning, while other Muslims find family planning consistent with their faith.

Population Perspectives: The Middle East and North Africa is one in a series of seven regional papers examining population change in the world's regions published by the Population Reference Bureau, October 1986. It was compiled and edited by Paola Scommegna based on the U.N. Fund for Population Activities' *Population Profile No. 22*, "Population Problems in the Arab World," by Abdel-Rahim Omran, New York, 1984. Used by permission. Additional background information came from The Center for Information on America, *Population Profiles: The Middle East*, by Cary Davis, Washington, D.C., 1981; *The Middle East and North Africa 1986*, Europa Publications Ltd., London, 1985, and various reports published by the U.N. Food and Agriculture Organization.

The Population Reference Bureau, Inc., 777 14th St. NW, Washington, D.C. 20005, is a non-profit educational organization established in 1929. The Bureau is a source of information on the facts and implications of national and world population trends.



Sub-Saharan Africa

Before 1960 only six sub-Saharan African countries were independent and represented in the United Nations. Today sub-Saharan Africa's delegation totals 46.

These new countries have faced tremendous challenges building nations within borders drawn by colonial powers that often brought together diverse and antagonistic ethnic groups. Nevertheless, they have made substantial gains since 1960: the proportion of children in school has more than doubled and life expectancy—a sign of a society's health and well-being—has increased by 10 years. However, many African countries are facing a crisis in their development—the result of forces more complex than drought—that threatens to undermine the progress they have made since independence.

Worldwide attention in 1985 was focused on emergency food relief to stem the hunger and famine spreading across the region, largely attributed to four years of drought and crop failure. But the drought is only the triggering event in sub-Saharan Africa's food crisis. Per capita food production has been declining since the late 1960s, the result of political upheavals, government policies that gave short shrift to farmers, and rapid population growth. Because agriculture is by far Africa's largest economic activity, this in turn has contributed to economic decline in an already impoverished region. Gross domestic product, which grew faster than population during the 1970s, fell in the early 1980s, so that per capita income in 1983 was 4 percent below that of 1970. A proportionally large debt owed to foreign sources, combined with a downturn in world trade in the goods that Africa exports, makes prospects for a quick turnaround bleak.

In future years, population growth will play an even greater role in shaping Africa's future. Birth rates are collectively the world's highest and, unlike rates in other developing regions, show few signs of falling. Addressing Africa's rapid population growth is among the challenges African leaders face in their efforts to achieve further social and economic progress.

POPULATION DYNAMICS

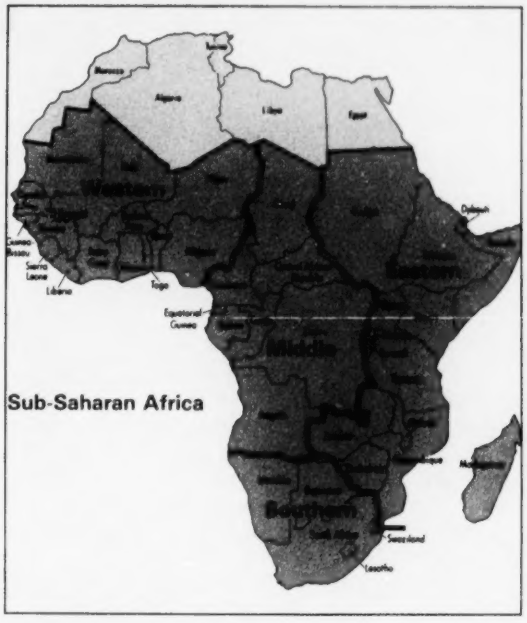
The 46 countries of sub-Saharan Africa cover about 20 percent of the earth's land surface and are home to 9 percent of the human population. The land area is about three times that of the United States, while the estimated 1986 population of 452 million was not yet twice the U.S.'s 241 million.

The population is diverse, with more than 800 ethnic groups speaking more than a thousand different languages or dialects. Diversity is also characteristic of the economic situation of the countries, although these differences are often masked in generalizations about the region. The low-income, semi-arid nations—Burkina Faso, Chad, Gambia, Mali, Mauritania, Niger, and Somalia—contain only about 8 percent of the population. Even adding the populations of the other countries with difficult terrains and few resources—Burundi, Lesotho, Rwanda, and Senegal—raises the proportion only to 13 percent. Some 30 percent of the region's population, with much higher per capita incomes, lives in the oil-exporting nations. These are led by Nigeria and include Angola, Cameroon, Congo, and Gabon. Most of the remaining nations are rich in natural resources, although their economic growth has been poor and many of them are among the poorest countries in the world. These remaining countries account for about 60 percent of the regional population.

Although 23 of the 36 poorest countries are located in sub-Saharan Africa, a greater number of impoverished people live in the Asian subcontinent which is made up of Bangladesh, India, Nepal, Pakistan and Sri Lanka. Nevertheless, poverty is a major characteristic of the region, and the situation has worsened in recent years. Most of the region's population live in rural areas, eking out a living through subsistence farming and always subject to the unpredictable tropical climate.

UN photo 153726/John Isaac

Women in sub-Saharan Africa give birth more often than women anywhere else—in Western Africa they average nearly 7 children each.



This regional paper considers the 46 African countries south of the Sahara desert, including those on the continent and the island of Madagascar, named at left. It also includes the following island countries not shown: Cape Verde, Comoros, Mauritius, and Reunion. Of the 46 countries, Reunion and Namibia are not members of the U.N. Different statistical sources can have different regional definitions, so be careful when comparing regional data.

Population Growth: Fertility and Mortality

Women in sub-Saharan Africa give birth more often than women in any other major region of the world. In Western Africa for 1984, the U.N. estimated the fertility rate—the average number of children women have—at 6.9 per woman. The highest rate for a comparable sub-region outside Africa—those of "Middle South Asia" which includes Bangladesh, India, and Pakistan—was a total fertility rate of 5.3 children per woman. Women in Kenya at the current estimated total fertility rate would average eight births apiece over the course of their reproductive years.

Current death rates are also among the world's highest and life expectancies at birth consequently among the lowest. Estimated life expectancy at birth in 1984 was 50 years or more in only 14 countries in sub-Saharan Africa. The populations of most countries have life expectancies in the 40s, but they range to as low as 34. Life expectancy for the region has increased steadily since the 1950s, with the elimination of smallpox, for example, and better control of epidemic diseases like yellow fever and malaria.

Because birth rates have been so high for so long in sub-Saharan Africa and to a lesser degree because of the decline in mortality, especially infant and child mortality, the populations of the different countries are very young. The U.N. estimates that about 45 percent of the population is under age 15 in all but a few countries. (This compares with 22 percent in the United States.)

This youthful character of the African population is important for many reasons. An exceptionally large share of development resources must go to meet the immediate needs of the young—education and health services, for example. Demographically, the large proportion of children means that much momentum for future growth is built into the population. The numbers of young people entering the childbearing ages are so much larger than the numbers in the older ages where most deaths usually occur that even when (and if) fertility drops to the "replacement" level of a little more than two births per woman, births could continue to outstrip deaths leading to continued population growth for at least 50 years. If replacement level fertility were attained immediately, virtually all the national populations of sub-Saharan Africa would grow by another 80 to 100 percent because of the momentum built into their youthful populations.

"We should seek to reduce infant mortality to the minimum so that the number of surviving births should correspond, more or less, to the number of desirable births. . ."
—President Mobutu, Zaire

International Migration and Refugees

The peoples of Africa have long been migratory and migration continues in contemporary Africa. Africans migrate across national borders in great numbers on a voluntary basis. As with rural-to-urban migration, the motivation is economic as workers seek better jobs in neighboring countries—the mines of South Africa, the hotels and factories of Nigeria, on the cocoa farms of the Ivory Coast. Over the past decade, large numbers of West Africans also left home looking for employment in the oil-driven economy of Nigeria. When oil prices declined in 1983, more than 2 million workers were expelled.

Another large-scale movement across national borders in Africa is involuntary. Uprooted by war, political strife, and drought, multitudes of refugees have been forced to flee their homes. Ethiopia is the single largest source country. By 1984, more than a million refugees from that war-torn and famine-stricken country were living in other parts of the continent, according to U.N. estimates. Overall by 1984, Africa had about 2.7 million refugees counted by the U.N. and undoubtedly hundreds of thousands more that do not show up in official statistics.

CHALLENGES FOR THE FUTURE

Rapid population growth makes sub-Saharan Africa's efforts to achieve social and economic development more difficult. Most visibly it constrains efforts to feed people adequately, preserve the land base

essential for future development, catch up with the demand for jobs, education and health services and cope with the growth of cities.

Food Production

In mid-1986, the U.N. Food and Agriculture Organization reported that six sub-Saharan African countries were still suffering from what had been one of the worst droughts in history. Massive food aid shipments had been required since 1983 to avert the famine that took the lives of hundreds of thousands of people in the early 1980s.

This tragic crisis had been brewing for two decades. In the 1960s agricultural production increased by about 2.3 percent a year in the region, roughly equivalent to population growth, so that per capita food production stayed about even. Since then, the region has become the only one in the world where food production did not keep pace with population growth, as the rate of food production has slowed and population growth has accelerated. During the 1970s, the annual gain in food production fell to about 1.3 percent, less than half the population growth rate of 2.7 percent. Thus the balance between food production and population growth was already negative when the latest drought struck in the early 1980s. Then between 1981 and 1983, per capita food production plunged 14 percent.

From near self-sufficiency in food production in 1970, sub-Saharan Africa saw the cost of food imports soar sixfold by 1978. By 1984, imports provided one-fifth of the region's cereal requirements. By the early 1980s, estimates of the chronically malnourished proportion of the population ranged as high as 60 percent. Declining per capita food production combined with already chronic malnutrition means that when drought strikes, the result can be severe physical and mental damage, and often starvation.

Africa's food crisis cannot be attributed solely to rapid population growth. Political instability and military conflict disrupt farming. One of the region's worst records for agricultural production in the 1970s was that of Uganda during the rise and fall of the regime of Idi Amin. Ethiopia's current food crisis has been greatly exacerbated by two decades of civil war. Since independence, about 20 wars have occurred within the region and more than 70 leaders in 29 African nations have fallen by assassination or coup.

Frequently government policies have done more to depress food production than encourage it. Prices for basic foods are controlled by the government in most African countries, usually to the benefit of urban consumers and the detriment of rural producers. Prices are low for the imported food grains that urban dwellers prefer—rice, wheat and corn—because governments commandeer large quantities at low prices, which drives prices down. Governments frequently use some of the taxes from cash crops to subsidize food crop prices. Also, imports usually come in duty free and often at favorable exchange rates. All this depresses the demand and prices for locally grown food, such as cassava, corn, sorghum, millet, and other rough grains, and thus reduces farmers' incentives to grow more food.

"The magnitude of rural women's labor and the range of their activities have been underestimated or ignored. . . Women are involved not only in food production but in its processing and distribution as well. They also build their own homes and perform activities such as hunting."
—Ivy Matsepe-Casaburri, South Africa, 1983

Outside forces have helped shape the policies of African governments also. African countries owed more than $50 billion to foreign banks, governments and international institutions like the World Bank in 1986. In 1983, interest payments alone consumed about one-quarter of Africa's export earnings—the foreign currency Africa earns trading with other countries. In 1983 one West African country was forced to sell off its 50,000 ton food reserve in order to repay its debts to French banks. Usually the effect of debt on food policy is less direct, as African countries borrow more (when they can) and try to earn more by increasing exports.

Mike Goldwater/Network

Migrants fleeing drought in sub-Saharan Africa.

Since most African economies rely heavily on a single commodity that they export, it is often difficult to increase earnings. When the price of a commodity falls, as coffee and cocoa did between 1979 and 1981, the economies of exporting countries are devastated.

These single-product economies are a legacy of colonial systems which developed colonies as suppliers of one or two commodities for European markets. Transport systems were developed to move these products to port, but not to encourage trade among the colonies. Food crops—maize, millet, sorghum—were pushed off onto less fertile land.

One key to Africa's ability to feed itself is the availability of unused arable land. According to a recent study by the U.N. Food and Agriculture Organization entitled *Land Resources for Populations of the Future*, sub-Saharan Africa in theory has enough land to feed its current population and much more, without imports. It concluded that with subsistence farming methods (no fertilizers or pesticides, traditional seed varieties and no conservation efforts), enough arable land exists to feed indefinitely a population 2.8 times that of 1975. That population,

however, would be considerably smaller than the 1.4 billion projected by the U.N. as most likely for sub-Saharan Africa in 2025. Also, the situation reported by the FAO does not consider that much land is used to grow non-food crops (rubber, cotton) and the findings are made more complex when examined country by country.

Land and the Environment

Sub-Saharan Africa's food production capacity is threatened by deforestation and desertification of land already in use. Ninety percent of the region's people depend on wood as their chief source of energy. But forests are being depleted at a disturbing rate due to uncontrolled cutting—some to meet the demand for export hardwoods, but most for wood to be used for household fires. Farm settlements are also encroaching onto forest land. Some experts put deforestation at 50 acres a minute, and already 18 sub-Saharan African countries are facing acute shortages of firewood.

Deforestation in farming areas is especially harmful because it results in deterioration of the soil, both because the soil is exposed to erosion and because crop and animal wastes formerly used as fertilizers are burned for fuel in place of wood. Soil deterioration and the increased time it takes to find fuelwood reduce food production and, along with shorter cooking times (to conserve fuel), contribute to poorer nutrition.

By allowing wind to strip the land bare of topsoil, deforestation is one of the factors in the relentless desertification taking place in Africa, especially in the Sahel region bordering the Sahara Desert. But overgrazing is also important in this loss of at least marginally useful land to permanent desert. Spurred by the growth of the human populace and their needs, the livestock population is also expanding rapidly. The U.N. Environment Program estimates that overgrazing, along with deforestation and poor farming practices, is turning 24,000 square miles of African land into desert each year. Deforestation and desertification are destroying land resources on which much of sub-Saharan Africa's future depends.

Education

African governments have made strong commitments to education since independence. In about two-thirds of the countries, at least 16 percent of total government expenditure goes to education, more than any other developmental sector. Enrollment ratios—the proportion of students enrolled in school compared to the number of children of school-age—have grown impressively. Between 1960 and 1980 enrollment ratios grew from 44 to 79 percent at the primary level and 5 to 21 percent at the secondary level.

This educational progress since independence seems to be faltering in the 1980s as government funds shrink and education must compete with other investments. Further, universal primary school enrollment is becoming more difficult to attain as the numbers of primary-school-age children escalate. Over the next two decades, most sub-Saharan African countries face at least a doubling of their school-age populations. Thus more resources will be needed just to maintain current enrollment ratios.

Although African girls are still much less likely than boys to have access to schooling, their enrollment rates have also soared since independence. Starting from a lower base, female enrollment ratios in Africa grew twice as fast as those of males between 1960 and 1980. However, in 1980 there were 78 girls for every 100 boys in African primary schools and 64 girls per 100 boys at the secondary level.

". . . Under the First Republic, our country originally opted for a pro-birth policy because a skilled and plentiful labour force was needed to help it develop its tremendous agricultural and industrial potential. Now, however, it has come to realize that population growth is not necessarily synonymous with economic development. . ."

—Colonel Lasana Conte,
Head of State, President of Guinea

Labor Force and Employment

There is a growing gap between the number of school graduates and the supply of jobs requiring some education. In Kenya during the 1980s there were more than six times as many graduates as jobs in the modern sector.

This discrepancy between jobs and workers will continue to grow. Putting together International Labour Organization projections of labor force participation and U.N. medium population projections indicates that the working-age population (aged 15-64) in sub-Saharan Africa will grow from 154 million in 1980 to 265 million in 2000, an increase of 111 million workers in just 20 years. "Labor force participation" is a developed country concept which is difficult to apply to the rural economies of sub-Saharan Africa. However, these projections illustrate

World Bank photo by Ray Witlin

Overgrazing, along with deforestation and poor farming practices, is turning vast quantities of African land into desert.

the tremendous future demand for new jobs. These increases are coming at a time when the region's economies have not been growing and are not projected to grow at rapid rates. Also important to keep in mind is that most new entrants to the labor force between 1980 and 2000 are children who have already been born, so these projections can be little affected by fertility decline in the next 15 years.

Adding large numbers of workers to the labor force in a short period of time is not necessarily undesirable. Japan's large labor force was a key factor in its economic growth. However, Africa's workers are mostly poorly educated and trained and often in poor health. The equipment and infrastructure—good roads, widespread electricity, etc.—to make workers productive are also lacking.

"A child is born not only with a mouth to feed but also with two hands with which to work."
—African proverb

It is the agricultural sector, and largely the small subsistence farms within that sector, that will have to absorb most of the tens of millions of new African workers between 1980 and 2000 and thereafter. Unlike the past, most of these new workers will have at least some education and will aspire to modern living and consumption standards. This means that the tremendous labor force growth is not only an economic issue but can also be expected to escalate social and political demands.

In most parts of the world, women who hold a paid job outside the home have fewer children than those who do not. African urban women are beginning to participate in the formal job market but research suggests that so far this is having little effect in reducing fertility. With an abundant supply of relatives to provide child care, women are able to have large families without sacrificing employment. Also, rich women hire maids and houseboys from the vast pool of unskilled labor. Poor women who work as street vendors bring their children with them. At least initially, African women seem to be finding ways to adapt rural patterns of high fertility into urban life.

Life Expectancy and Health

Overall life expectancy at birth for the countries of sub-Saharan Africa is up from 40 years in 1960, but is still estimated to be only 49 years in the mid-1980s. This low figure is largely due to high infant and child mortality. Deaths to infants under age one average more than 100 per 1,000 live births for all but 13 countries. In comparison, infant mortality rates in North America and Western Europe are around 10 and lower.

The chief causes of death (and high sickness rates) are infectious diseases such as tuberculosis and malaria; intestinal infestations like hookworm; and, among infants and children especially, diarrhea and consequent dehydration; and malnutrition. Better diets, better health and sanitary practices, and better health care could combine to bring death rates plummeting. UNICEF, for example, began a campaign in 1982 for four low-cost basic health measures that could cut child death rates in half: oral rehydration, a simple treatment to stop diarrheal dehydration; immunization against six common diseases; breastfeeding for at least six months; and growth monitoring to enable mothers to detect malnutrition early and deal with it.

The overall statistics suggest that health services have improved since independence in most sub-Saharan African countries, but such statistics fail to indicate that most health professionals, virtually all hospitals, and the majority of other health facilities are located in urban centers, while most of the population resides in rural areas. Consequently, a majority of Africans have little or no access to modern health care.

Rapid population growth affects health in at least three ways. First, as Africa's current record shows, rapid increases in numbers combined with economic stagnation, make it difficult to increase per capita spending so that services can be expanded or improved. Second, prolonged high fertility means a high proportion of young children in the population—the group with the highest illness and mortality rates in developing countries and hence the greatest need for health services. Third, high fertility and closely spaced births are associated with high rates of maternal and child illness and mortality.

African women typically begin childbearing as soon as biologically possible and stop only at menopause. Thus their health is endangered by many pregnancies during the far less favorable teenage and later reproductive years and too little time to recuperate between closely spaced pregnancies. For children, close birth spacing frequently means that breastfeeding of an older infant is interrupted after less than a year, leading to malnutrition and the child's death. For these reasons, many African governments justify support of family planning services not on the ground that rapid population growth retards social and economic development but rather that improved child spacing would benefit the health of African women and their children.

Urban Growth

According to U.N. estimates, the overall urban population in sub-Saharan Africa grew from 21 million in 1950 to 93 million in 1980, a 450 percent increase in 30 years. For the 30 years to 2010, the U.N. projects a 475 percent increase to 441 million. The proportion of the total population living in urban areas is projected to grow from 24 percent in 1980 to 45 percent by 2010.

Government employees help build a bridge in Burkina Faso. There will be a tremendous demand for new jobs in sub-Saharan Africa as today's children reach working age.

World Bank photo by Hilda Bijur

Future gains in education in Africa may slow as the projected populations of school age children double over the next 20 years.

City managers face enormous challenges just maintaining—let alone improving—city services such as sewer systems, water and electricity. Projected housing needs are a prime example of these pressures. In Kenya, about 3 million new housing units would be required to accommodate the projected growth in urban dwellers between 1980 and 2010—roughly equivalent to constructing 15 new Nairobis in 30 years. Further, most of this will have to be government funded; in recent years about 70 percent of Kenya's new households have been unable to afford privately built housing.

Rapid population growth has made sub-Saharan Africa's effort to achieve social and economic development more difficult. But, a slower rate of population growth would not in itself be enough for a successful development effort and should in no way be regarded as a substitute for needed agricultural reforms, radical land and water conservation measures, sustained economic growth and job creation, more and better education and health services. At the same time, a drop in population growth could help make social and economic development efforts more effective in improving the lives of African people.

THE STATUS OF WOMEN

Women's restricted roles contribute to the persistence of high fertility. Although African women have traditionally handled most of the family food production and have therefore played a major role in agriculture, their primary roles are still seen as those of wife and mother. They have limited legal rights and in many places their position is further weakened by the practice of polygamy—the taking of more than one wife. Precisely because of the limited opportunities women have, the status imparted by childbearing becomes all the more important.

African women value children for their labor as well. With the arduous chores of primitive cooking and housekeeping, added to labor in the fields, it is little wonder that women welcome assistance provided by children. Even children enrolled in primary school help with house and farm work. With secondary school enrollment so low, virtually all rural youth are available for full-time work around the ages of ten or eleven.

African parents understandably fear the economic threat inherent in continuing high infant and child death rates. In the absence of public social security programs for old age, children are seen as the only sure source of parent's security and economic support in old age. African women often lack the right to inherit the use of land, so for them in particular there is a real need for many sons to ensure that some will survive to take care of them in old age.

PERSPECTIVES ON POPULATION POLICY

Until very recently, many African leaders viewed much of the pressure to reduce population growth to speed development as coming from North American and European aid donors. Africans have been concerned that emphasis on population policy glosses over inequalities in the world income distribution which many consider the real root of the region's poverty and slow development.

However, high population growth rates in combination with stagnating or slowly advancing social and economic development efforts throughout the region have prompted a new look at population policy in sub-Saharan Africa. An increasing number of African nations have adopted or are considering national population policies to reduce fertility and the rate of population growth. At the 1986 All-Africa Parliamentarians Conference on Population and Development lawmakers from several dozen sub-Saharan African countries adopted a declaration recognizing the role of population in development, and the need for government action to improve living standards. The policymakers emphasized the need for improved health care, new family planning research and services, realistic migration policies, improved status of women, and self-sufficiency in food production for the continent as a whole.

The ability of African nations to implement policies that reduce fertility is an open question; only Zimbabwe has made significant progress so far. In most of the region's countries the social and economic factors contributing to high fertility remain strong. Religious and tribal rivalries also make population and family planning programs very sensitive political issues. Yet, political leaders worldwide tend to focus on short-term issues for which they will be held politically responsible, rather than longer-term issues which demand some vision of the future. African lawmakers' efforts to address the problems posed by rapid population growth represent an important step toward improving the quality of life for all Africans.

Population Perspectives: Sub-Saharan Africa is one in a series of seven regional papers examining population change in the world's regions published by the Population Reference Bureau, October 1986. It was compiled and edited by Paola Scommegna based on the Population Reference Bureau's *Population Bulletin* (vol. 40, No. 1) "Sub-Saharan Africa: Population Pressures on Development," by Thomas J. Goliber, 1985.

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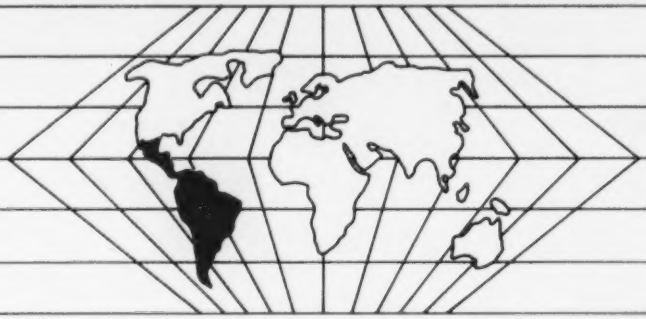


Latin America and the Caribbean

The Latin American region has witnessed dramatic changes in the past 40 years. The years following World War II have brought economic development, industrialization, and a rapidly growing population, the combination of which have had far-reaching political, economic, and social effects.

In 1950, Latin America and the Caribbean's population of 165 million was on a par with the 166 million of North America (the United States plus Canada). Since then Latin America's population has grown much more rapidly than its neighbor, pushing the total to 417 million in 1986, versus 267 million in North America.

This rapid population growth was accompanied by massive migration of people from the countryside to cities and to countries outside the region. The region's many urban dwellers are concentrated in a few large cities, placing pressure on city services, housing, and jobs. The economic downturns experienced by many Latin American countries in the 1980s have compounded this pressure.

However, Latin American families are smaller today than they were 25 years ago: on average women have four children each as compared to more than six children each in 1960. Smaller families seem to be the result of both the availability of family planning and young adults weighing the costs of having large families as they find themselves less able to realize their aspirations for a better life.

Though economic pressures could eventually lead to even smaller families, government leaders in the near future are likely to be challenged with more employment problems, continued rapid population growth, and an even larger exodus of migrants.

POPULATION DYNAMICS

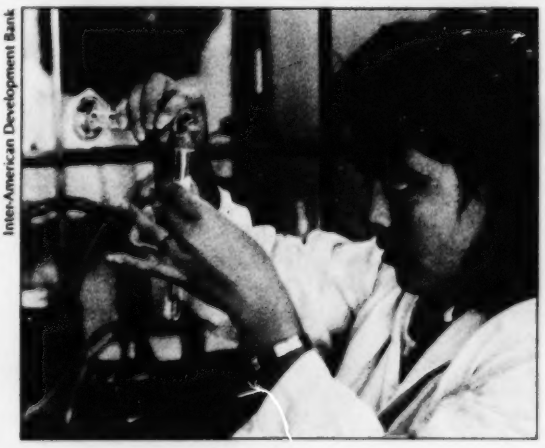
The land areas of North America and Latin America (which includes Mexico) are about equal—7.6 million square miles in the former and 7.9 million in the latter. Climate, mountains, deserts, and jungles in the Western Hemisphere make much of the terrain unsuitable for human settlement. As a result, much of the population of both North America and Latin America is concentrated along coasts and river valleys and in other hospitable areas.

Most Latin American countries achieved political independence from Spain or Portugal during the early 1800s. Their economic dependence on former colonial powers, however, continued well into this century when Great Britain and later the United States took over as central forces in Latin America's economic and political affairs.

Population Growth: Fertility and Mortality

The 1930s closed an era during which immigration contributed most to Latin American population growth, and ushered in a period of rising natural increase (the excess of births over death), which accelerated after World War II. From 107 million in 1930, the population of the region grew to 165 million in 1950 and then surged to 417 million in 1986. The average annual growth rate, which had been 2.1 percent during the 1930s and 1940s, leaped to 2.8 percent between 1950 and 1965 and then declined to 2.4 percent a year between 1965 and 1985.

The jump in Latin America's growth rate between 1950 and 1965 was caused by a decline in death rates as more people lived longer. Vaccinations, drugs like penicillin, and spraying against malaria contributed to dramatic increases in life expectancy. In particular, many deaths of young children and adults over 40 were prevented. By the late



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Engineering student in Costa Rica. Today, almost as many females as males go to school in Latin America and the Caribbean, even at the college level.

This regional paper on Latin America includes Mexico and all the countries of Central America, South America, and the Caribbean. The following Caribbean islands are not named on the map at left, but are part of the region: Antigua and Barbuda, the Bahamas, Barbados, Dominica, Grenada, St. Christopher and Nevis, St. Lucia, St. Vincent and the Grenadines. The islands of Guadaloupe, Martinique, Netherlands Antilles, and Puerto Rico are not independent countries and as such are not U.N. members.

Different statistical sources can have different regional definitions, so be careful when comparing regional data.

1960s, most Latin American countries had life expectancies of around 60 years, representing gains of 10 to 15 years since 1930.

The region's growth rate has dropped since the late 1960s because women began having fewer children on average. Before 1965, Latin American women averaged more than six children each (over seven children each in many countries). By 1986, Latin American women were having an average of four children each. However, this rate varies from a high of six children in some parts of Central America to as low as three children per woman in the Caribbean and the Southern-most countries of Argentina, Chile, and Uruguay which historically have had lower-than-average fertility.

The drop in fertility is linked to more education and job opportunities for women and to greater availability of birth control. Crowded urban life and increased income have also motivated couples to control their fertility, either by spacing births or by having fewer children, usually a combination of both. By the early 1980s, 40 to 60 percent of all Latin American women aged 15 to 44 who were married or cohabitating were using some form of contraception.

Rural families, however, remain large in many Latin American countries. Land ownership systems give most people little chance of owning land and require a certain number of family members in order to maintain control of the land they have. Children are also needed to help with the work on small family farms.

Although women are having fewer children each, the number of women in their childbearing ages is large—a result of the great number of children born during the population boom of the late 1950s and early 1960s. Childbearing by this group will sustain population growth in future years. The region's population of 417 million in 1986 is projected to grow to 779 million by 2025. Late in the 21st century the population is expected to stabilize—the number of births will equal the number of deaths—with the population at around one billion.

"Rapid population increase is one of the factors which has been making it difficult for the government to adequately provide social services such as education and health care."
—Edward P. Seaga, Prime Minister of Jamaica

As in other developing regions, mortality in Latin America dropped rapidly, well before birth rates began to fall. In 1986, overall death rates in Latin America were lower and life expectancy higher than in other developing regions. This is partly because such large proportions of country populations consist of young people with naturally lower mortality. Future gains in life expectancy are likely to depend not so much on the introduction of new health technology as on increasing access of low-income groups to health services and improved living conditions.

International Migration and Refugees

Since the 1950s, two Latin American international migration patterns have taken on major economic, political, and demographic significance. The first is the "brain drain," or emigration of well-educated, highly skilled workers to industrialized countries outside the region, particularly the United States, and from less to more developed countries within Latin America. The second is the massive migration of unskilled and semi-skilled workers, who were joined in the late 1970s and 1980s by refugees fleeing civil strife in El Salvador, Nicaragua, and Guatemala.

Venezuela, Argentina, and the

United States have been the main destinations for both legal and undocumented Latin American migrants crossing national boundaries. Also important are migrant and refugee streams among Central American countries, particularly from Nicaragua and El Salvador into Costa Rica and Guatemala, and from Central America to Mexico and between Caribbean countries.

The largest and steadily increasing international movement of Latin Americans has been directed toward the United States—mostly from Mexico, but also from Central America, Colombia, and Caribbean countries. International migrants move for the same reasons as migrants within nations, to find good jobs and for a better chance at a higher standard of living. Today more than ever, pressures founded on centuries of unequal land distribution, limited employment and earning opportunities, and high rates of population growth result in millions of persons crossing international borders. Political tensions have also been heightened and frequently erupt into violence, which further propels still more international movement.

In their new countries, Latin American migrants often fill the jobs that natives shun. Immigrants earn less than natives, on average, but more than they would doing the same work in their home countries. The savings they manage to send home or bring back with them add up to large shares of the income of their home communities and of their countries.

CHALLENGES FOR THE FUTURE

Infant Mortality and Health

Infants and young children are more susceptible than any other age group to infectious diseases associated with malnutrition and unsanitary living conditions and, because of their low body weights, they are more likely than older people to die from these infections without prompt medical attention. In fact, infant and child mortality rates are so sensitive to income and living conditions that they are often used to measure the standard of living in a country. Latin American infant mortality rates fell by 30 to 50 percent between 1950 and 1985, but the current average rate for the region, 62 infant deaths per 1,000 live births, is still about six times the level of developed countries, and the rates range from as low as 11 in Barbados to over 100 in Bolivia and Haiti.

Persistent gaps between the incomes of the rich and poor are major obstacles to lowering infant mortality. Education of the mother is strongly related to the health and survival of her children, both because a woman with some schooling knows more about sanitation and medical care and because she is more likely than an uneducated woman to be in a higher income group enjoying a healthier lifestyle and to live in an urban area where medical services are more accessible. A study in seven Latin American countries showed that children of mothers with no schooling were three to five times more likely to die before their second birthday than those born to mothers with at least 10 years of schooling.

Furthermore, the majority of children in many Latin American countries are born into the higher-risk, low-income groups of families. This is partly because these groups often represent the largest share of the total population, but also because low-income women tend to have higher fertility and produce a disproportionate share of annual births. High fertility contributes to high infant mortality because births are likely to be closely spaced. Studies have shown that children born less than two years apart have high risks of birth defects and of death in infancy or early childhood.

Infant mortality in Costa Rica has fallen to low levels in all income groups, largely because of government policies to expand medical and family planning services throughout the country and provide safe drinking water. Costa Rica's experience may be difficult to repeat in countries with less homogeneous populations, but it highlights the necessity of improving living conditions and access to health care for low-income groups if infant mortality is to fall in the many Latin American countries where it is still high.

Urban Growth

Latin America is by far the most urbanized of the world's developing regions. In the mid-1980s, some 67 percent of its population resided in localities officially classified as urban. By comparison, Africa was 30 percent urban and South Asia (Bangladesh, India, Nepal, and Pakistan) was 24 percent.

Urban growth places pressure on already limited city services. Housing, water, sanitation, streets, and public transportation, as well as schools and health facilities important to city life, cannot easily or quickly be scaled up as populations double and redouble. In addition, unemployment, urban poverty, and slum housing, along with the political unrest these can generate, create the most pressing issues the region faces in the immediate future.

The migrants flooding into Latin American cities face severe shortages of housing as well as jobs. Out of this great demand has evolved an urban phenomenon seen throughout the developing world and on the

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Montevideo, Uruguay. Latin America is the world's most urbanized developing region, and urban areas continue to grow rapidly.

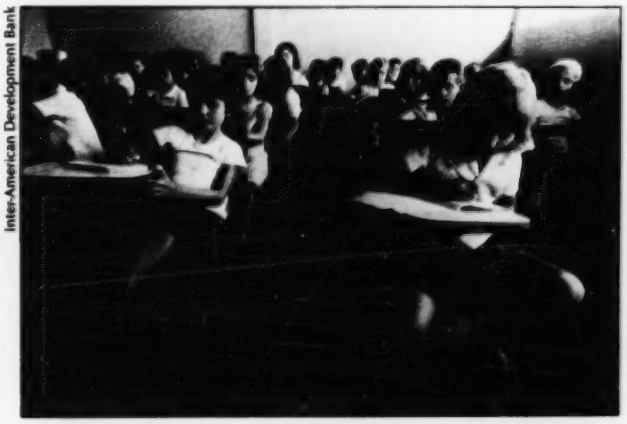
"The process of demographic change cannot be viewed purely as the result of using instruments of population control; on the contrary, it must be the result of increased employment opportunities, education, health and assistance to the family."
—Belisario Betancur-Cuartas, Former President of Colombia

outskirts of every major Latin American city: the "shantytown." Here, cut off from the city's economic mainstream and many of its services, the urban poor live in makeshift shelters of cardboard, wood scraps, corrugated plastic, and mud. Nearly half (46 percent) of Mexico City's population lived in shantytowns or other slums in 1970; in Caracas, Venezuela, the proportion was 42 percent, and in Bogota, Colombia, 60 percent. The urban poor have been particularly hard hit by Latin America's economic crisis of the 1980s, so the figures could well be higher.

Wretched living conditions and unemployment prompt some shantytown and slum dwellers to give up and return to the countryside or move to another city. Others give vent to their frustrations in strikes and demonstrations. One visible sign of stress in all large Latin American cities is the "abandoned children," apparently homeless and roaming the streets, begging, stealing, and sometimes forming criminal gangs. They are the sons and daughters of families disintegrated by unemployment. Some have been infants left at police stations, churches, or in the streets by desperate mothers. Others have simply run away from the extreme poverty of their slum families. Estimates of the total number of abandoned children in Latin America vary widely, but all are in the millions.

Urban areas are not the only victims of urban migration. The rural areas also lose as they are drained of their younger, better educated, and more skilled workers.

Continued rapid urban growth will be a prominent feature in Latin America's demographic picture during the late 1980s and 1990s. It is almost certain that towns and cities will absorb all of the region's natural population increase during the coming decades, plus the spillover from rural areas through migration. The staggering populations projected for the largest metropolitan areas in 2000—the U.N. projects that the region will have 50 cities with populations over 1 million—suggest that even if planners succeed in dampening the growth of the largest cities, the problems of coping with mass city populations will only spread to other localities.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First-graders in Brazil. Educational gains in Latin America have been remarkable and have contributed to the fertility declines in the past 20 years.

Labor Force and Employment

The shift from agriculture to a more industrialized economy after World War II changed the structure of the Latin American labor force. In 1950 more than half the labor force was working in agriculture in all but five countries (Argentina, Chile, Uruguay, Venezuela, and Cuba) and close to two-thirds or more in Ecuador, several Central American countries, and in the Dominican Republic and Haiti. By 1980 agriculture accounted for more than half the work force in only Guatemala, Honduras, and Haiti.

As manufacturing and related industries replaced agriculture as the major source of employment for the urban population, many job hunters sought employment in construction and services. These services include those in the "informal" sector, ranging from street vendors, errand runners, and odd-job performers to small-scale construction and repair shops, all operating without the benefits of wage contracts, tax payments, and bank credit of the formal sector. This informal sector is important in absorbing the growing masses of job-hunters in urban Latin America.

The ranks of the urban masses will continue to swell. The U.N. projects that Latin America's youth population—young adults aged 15 to 24—will grow from 82 million to 104 million in the 15 years between 1985 and 2000. The labor market will somehow have to absorb this increase.

Education

It is clear that both males and females in Latin America and the Caribbean have made remarkable educational gains in the postwar period, though country differences remain. In 1985, an estimated 84 percent of the region's children aged 6 to 11 were enrolled in school, compared with 58 percent in 1960. During the same time period, the enrollment rate for the population aged 12 to 17 increased from 36 to 71 percent. This increase in education for both males and females is one of the major forces behind the often dramatic shifts in Latin American demographic patterns since World War II.

Food Production

Most food production is carried out in the temperate highlands and along the coastal rim of South America and Central America. The amount of land suitable for agriculture is relatively scarce in Latin America. The most fertile soils are in Argentina, Brazil, and Uruguay in the southern region, and the interior valleys of Central America, Colombia, Ecuador, and Chile. Most of the region is covered by dense rain forests, mountains, and deserts.

The majority of the rural people, especially in Mexico, Central America, Brazil, and the Andean countries, are engaged in subsistence farming and produce few products for markets outside of their villages. Corn, beans, potatoes, rice, yams, and cassava are the mainstays of these people's diets, and their agricultural methods are often primitive.

Government policies have long favored urban areas over rural areas, so little investment in agriculture has taken place in the region. As a result, farming in Latin America is highly traditional, and agricultural output has barely kept pace with the growth of population. Several countries, notably Brazil, Venezuela, Chile, and Argentina, have had to increase their food imports.

Several countries have carried out agrarian reform measures, primarily to satisfy demands of the poor farmers, and also in an attempt to improve agriculture. Debate continues over whether or not agrarian reform programs make farming more efficient or productive.

Land and the Environment

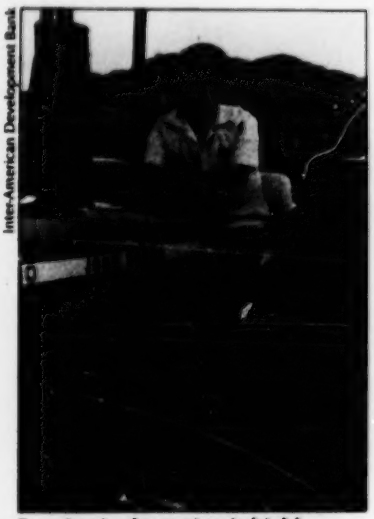
Eighteen percent of land in Latin America is threatened with desertification due to deforestation (the loss of trees); overgrazing of livestock; cultivation of weak soils; and shrinking fallow periods, during which soil is left to revitalize itself. Deforestation, caused by commercial logging for export, clearance for cattle ranching, and expanding population, is very bad for the environment. One grave consequence of deforestation is soil erosion, which results in the loss of protective soil cover and the water-holding capacity of the soil. This in turn silts up the rivers, clogs irrigation systems and causes floods. The end result is that the region's ability to feed itself is diminished.

STATUS OF WOMEN

Many women in Latin America perceive motherhood as their destiny—childbearing and childrearing have traditionally brought the greatest status to women. It is thus in the household that the region's women exercise their greatest degree of power and influence. However, some women do work in the paid labor force, though they are usually hired for the lower income positions.

The overall labor force participation rate for women in Latin America is low; only North Africa has a lower rate. This is because Latin America even more than other developing regions overlooks women's unpaid farm work when documenting labor force participation. Outside of agriculture, however, women's employment rates are generally higher than in other developing regions.

Today, almost as many females as males go to school. Enrollment for primary levels are only slightly less for girls than for boys, and even at the college level the difference in enrollment rates between men and women is small.



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Farming in the region is highly traditional, and most small farmers produce food for their own consumption, not the market.

Education and employment are linked—more education means better jobs. Both of these have contributed to changes in the roles of women in Latin America, and have had much to do with fertility declines since the late 1960s. They are also related to other important social and economic changes for individuals and families, such as migration and improved health and nutrition.

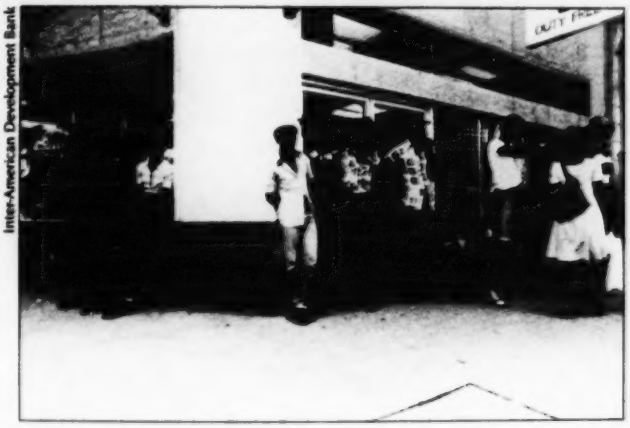
Families headed by women in informal unions or women who are single mothers—never married, separated, divorced or widowed—are overrepresented among the poor in Latin America. One in five households in the region is estimated to have a woman as its head, with primary responsibility for the support of dependent members. The legal structure of many Latin American countries recognizes rights and entitlements only for women who are or have been legally married. This puts single women household heads at a great disadvantage.

PERSPECTIVES ON POPULATION POLICY

Population policy, a statement of an intention regarding a present or foreseen population problem, may be related to population growth, composition, or characteristics, or to distribution, migration, or settlement.

"There is a right to procreation: all couples and individuals have the right to decide freely on the number and spacing of their children and, to that end, the State guarantees access to information, education, and basic family planning services. Abortion as a method of birth control is rejected as part of population policy."

—Luis Alberto Monge-Alvaraz,
President of the Republic of Costa Rica



Unemployed young men in Bridgetown, Barbados. Rapid urban growth has led to unemployment in the region's cities.

Latin American attitudes on population policy have reflected the views of "structuralist" social scientists, the military, and the Roman Catholic Church. Structuralists argue that unequal distribution of political power and wealth—particularly land—are the root causes of the region's economic problems. The military has resisted efforts to limit population growth because it sees family planning as an attempt by outsiders to weaken the country's power.

The Catholic church has a strong political as well as cultural influence in the region. Its teachings prohibit the use of artificial family planning and abortion. Despite the church's influence, many Roman Catholics do practice family planning in the region.

Eight countries within the region have specific goals to reduce population growth rates through family planning programs. These include Barbados, Colombia, the Dominican Republic, El Salvador, Guatemala, Jamaica, Mexico, and Puerto Rico. Eleven Latin American countries do not overtly seek to reduce growth rates but support family planning for health reasons. Finally the group of countries that either have no policy or are explicitly pronatalist—with policies designed to encourage childbearing—includes Bolivia, Chile (whose pronatalist policy was adopted by its military government in 1979), Argentina, and Uruguay.

While population growth and fertility rates have dominated the recent population policy debate in Latin America, other issues have also surfaced. Most of the governments have long been concerned about unbalanced population distribution and urbanization, particularly the overconcentration of population in the largest cities. Some redistribution programs have been tried, such as Amazonian frontier settlements and the shifting of the capital cities of Brazil and Argentina. But policies and large-scale programs to redistribute population are difficult to execute because the process of population redistribution and its links to other social and economic changes are so complex.

"... [How can you get] responsibility in paternity from a people that for centuries has been paternalistically manipulated in all spheres?"
—Abraham Lopez Lara, Mexico

In the coming years, Latin American policymakers will have to contend with the far-reaching consequences of continued high population growth. Extensive urban growth, and the resulting social requirements, such as health and education facilities, will pose problems for national governments. Another concern will involve the number of young people entering the work force in the future—the economy will have to expand to provide needed jobs. Finally, agricultural inputs will be necessary to help food production keep pace with a growing population, but not at the expense of the environment.

Population Perspectives: Latin America and the Caribbean is one in a series of seven regional papers examining population change in the world's regions published by the Population Reference Bureau, October 1986. It was compiled by Wendy Patriquin and Schuyler Richardson, and edited by Paola Scommegna, based on the Population Reference Bureau's *Population Bulletin* (Vol. 41, No. 3), "Population Pressures in Latin America," by Thomas W. Merrick, 1986.

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Notes

GLOSSARY OF POPULATION AND DEVELOPMENT TERMS

Birth Rate (or Crude Birth Rate). The annual number of births per 1,000 population. Not to be confused with the "growth rate."

Death Rate (or Crude Death Rate). The annual number of deaths per 1,000 population.

Demography. The scientific study of human populations, including their size, composition, distribution, density, growth, and other demographic and socioeconomic characteristics, and the causes and consequences of changes in these factors.

Dependency Ratio. The ratio of the economically dependent part (arbitrarily defined as those under 15 and over age 64) of the population to the productive part (those in the "working" ages of 15-64).

Developed Countries (or More Developed Countries). Those countries which have higher levels of per capita income, industrialization, and modernization. The "more developed" region of the world, according to the United Nations, includes all of Europe, Canada, the United States, Australia, Japan, New Zealand and the Soviet Union.

Developing Countries (or Less Developed Countries). Those countries which have lower levels of per capita income, industrialization, and modernization.

Doubling Time. The number of years required for a population of an area to double its present size, given the current rate of population growth. The estimate for "doubling time" is not intended to forecast the actual doubling of any population.

Growth Rate. The rate at which a population is increasing (or decreasing) in a given year due to natural increase and net migration (immigration minus emigration), expressed as a percentage of the base population.

Immigrant. A person who is admitted into a country to reside there permanently.

Infant Mortality Rate. The annual number of deaths to infants under one year of age per 1,000 live births in a given year.

Life Expectancy. The average number of years a person can be expected to live under current mortality conditions. Most commonly cited as life expectancy at birth.

Migration. A change of residence which is intended to be permanent and which involves crossing political boundaries. It may be international or internal.

Natural Increase. The surplus (or deficit) of births over deaths in a population in a given time period.

Population Momentum (or Momentum of Growth). The tendency for population growth to continue beyond the time that replacement level fertility has been achieved because of a relatively high concentration of people in the childbearing ages.

Population Projection. Computation of future changes in population numbers, given certain assumptions about future trends in the rates of fertility, mortality, and migration. Demographers often issue low, medium, and high projections of the same population, based on different assumptions on how these rates will change in the future.

Pronatalist Policy. The policy of a government, society, or social group to increase population growth by attempting to raise the number of births.

Refugee. A person forced to leave his or her country and unable to return because of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion.

Replacement Level Fertility. The level of fertility at which couples replace themselves, that is, a total fertility rate of 2.1 children per family (2 children to replace the parents and .1 child to account for deaths). It can be as high as 2.5 in countries with high mortality.

Total Fertility Rate (TFR). The average number of children that would be born to each women if each were to live through her childbearing lifetime bearing children at the same rate as women of those ages actually did in a given year.

Urban Population. The percentage of total population living in areas termed urban by that country.

Zero Population Growth. A population in equilibrium with a growth rate of zero, achieved when births plus immigration equal deaths plus emigration.

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